INTERNATIONAL FEDERATION OF CLINICAL CHEMISTRY AND LABORATORY MEDICINE SCIENTIFIC DIVISION* 
and 
INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY CHEMISTRY AND HUMAN HEALTH DIVISION†

PROPERTIES AND UNITS IN THE CLINICAL LABORATORY SCIENCES
PART XX. PROPERTIES AND UNITS IN CLINICAL AND ENVIRONMENTAL HUMAN TOXICOLOGY
(IUPAC Technical Report)

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Properties and units in the clinical laboratory sciences
Part XX. Properties and units in clinical and environmental human toxicology

(IUPAC Technical Report)

Abstract: This document describes the introduction of the concept of property in the field of clinical and environmental human toxicology for the presentation of results of clinical laboratory investigations. It follows the IFCC–IUPAC systematic terminological rules and attempts to create a common base for communication between the clinical chemist, the medical practitioner, the human toxicologist, and the environmental toxicologist.

The term designating a substance being a toxicant may be an international nonproprietary name (INN), a generic name, a registered trade name, a fantasy name, or other. This causes difficulties in the transmission of requests and reports on properties involving substances in biological fluids and environmental media to and from laboratories, to the end user, and in the collating of this information from different sources.

The document comprises a list of properties of human and environmental systems involving toxicants for use in transmitting medical laboratory data. The document recommends terms based on the format developed by the IFCC and IUPAC to facilitate interaction between disciplines and unambiguous interpretation of data, e.g., for purposes of risk interpretation. Systematic terms are presented together with a code (identified by the letters NPU) for each.

The complete CNPU Database may be found at <http://dior.imt.liu.se/cnpu/info.htm>.

Keywords: human; toxicology; environmental; property; NPU codes; clinical laboratories; units.

PREFACE

The present document is the 20th part of a series on properties and units in the clinical and environmental human toxicology laboratory sciences initiated in 1987.

The series currently comprises:

I. Syntax and semantic rules [1]
II. Kinds-of-property [2]
III. Elements (of properties) and their code values [3]
IV. Properties and their code values [4]
V. Properties and units in thrombosis and haemostasis [5]
VI. Properties and units in IOC-prohibited drugs [6]
VII. Properties and units in inborn errors of metabolism*
VIII. Properties and units in clinical microbiology [7]
IX. Properties and units in trace elements [8]
X. Properties and units in general clinical chemistry [9]
XI. Coding systems: Structure and guidelines [10]
XII. Properties and units in clinical pharmacology and toxicology [11]
XIII. Properties and units in reproduction and fertility [12]
XIV. Properties and units in tumor markers*
XV. www databases*
XVI. Properties and units in clinical allergology [13]
XVII. Properties and units for urinary calculi*
XVIII. Properties and units in clinical molecular biology [14]
XIX. Properties and units for transfusion medicine and immunohematology [15]
XX. Properties and units in clinical and environmental human toxicology (this report)

At the end, systematic terms, elaborated according to international standards and recommendations, should be available in the different domains of clinical laboratory sciences. The core of the series is code value strings representing concepts, that in combination delineate and define each property regardless of linguistic expression, thus avoiding errors during translation between languages.

FOREWORD

Clinical laboratory sciences are characterized by the exacting nature of the work performed and the demand for an accurate presentation of the outcome. Furthermore, the domain is transnational, international, or “global”.

The adherent informatics system therefore needs to identify the findings accurately and to present them with the degree of detail required. At the same time, it has to facilitate the transfer over linguistic and cultural barriers without distortion or loss of clarity, in order to promote clear, unambiguous, meaningful, and fully informative communication between different terminologies.

The degree to which a message (such as a laboratory report) needs to be expressed in a formal, systematic language depends on the cultural, linguistic, social, or professional distance between the communicating parties. The greater the distance, the greater the need of explicit information.

Within one laboratory, local jargon terms may be used which are usually well understood between colleagues, but which would not be sufficiently widely known for communication with the outside world. Likewise, a laboratory and its local community of users, such as hospital or community physicians, may use a “local dialect” of the language of clinical laboratory sciences, which is well understood by all concerned; but when the communication possibilities are wider, even transnational, risks of serious misunderstanding arise.

SCOPE

The purpose of this document is to apply the IFCC–IUPAC recommended syntax structures for request and report and to create a systematic terminology that can be used as the basis for encoding laboratory messages in the domain of drugs which are commonly also toxicants and in the domain of naturally occurring toxicants which occur in the human environment and are analyzed in environmental media. The systematic names recommended here are primarily for the purpose of unambiguous data exchange. Their use in routine language by clinicians and laboratory practitioners is optional but encouraged.

Trace elements that may be toxic are considered here with regard to their chemical speciation as far as it can be determined.

The system “hair” here is considered only where measurements have clear toxicological or clinical value. The systems “blood” and “plasma” refer to venous blood throughout. In all “systems”, “components” termed relate to that which is relevant in the sample and not to any derivatives measured.

*proposed but not continued

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This document does not consider radiation toxicology, which will be covered by a separate future project.

**TERMS AND DEFINITIONS**

**component**: part of a system [16]

EXAMPLE: Dextropropoxyphene as part of a given system.

NOTE: *Component* is used in a different sense in other areas of chemistry; see IUPAC “Gold Book” [18].

**differential quantity**: quantity that can be subtracted from, but cannot be divided by another quantity of the same kind

EXAMPLE: Substance concentration increment of ethanol in urine (present - 6 h earlier) = 32 µmol/l.

**differential scale**: scale with an ordered set of possible values for quantities of a given kind that are each a product of numerical value and unit of measurement such that a given difference between values corresponds to the same difference between magnitudes of the quantities along the scale [after 18]

EXAMPLE: Celsius temperature scale.

**discriminating value**: property value, obtained according to a given examination procedure, that separates the values of parent systems in two disjoint sets assumed to indicate different states with stated respective probabilities of false assignments

NOTE: The terms “discrimination value”, “discriminator”, and “cut-off value” are used as synonyms.

**drug**: substance which, when absorbed into a living organism, may modify one or more of its functions [19]

NOTE: The term is generally accepted for a substance taken for a therapeutic purpose, but is also commonly used for abused substances.

**kind-of-property**: common defining aspect of mutually comparable properties

NOTE 1: In ENV 1614, the term “property (in a general sense)” is used as a synonym for kind-of-property.

NOTE 2: A kind-of-property may be related to nominal scale (e.g., green, blue), ordinal scale (e.g., small, large), differential scale [e.g., 10 °C (i.e., 10 °C more than an arbitrary zero)], or rational scale (length 2 or 5 m); the last three types are related to kind-of-quantity.

NOTE 3: *Kind-of-property* is defined in the IUPAC “Gold Book” [18] in different words which do not sufficiently emphasize the commonality required.

**nominal property**: property that can be compared for equality with another property of the same kind, but has no magnitude

EXAMPLE: Color of a component in a particular medium.

**nominal scale**: scale with a set of possible values for properties of a given kind that are each a word or symbol without any relation to magnitude [after 18]

EXAMPLE: Terms for analgesic substances.
NOTE: The values may be listed in any arbitrary order according to practical considerations and convention.

**ordinal quantity**: quantity defined by a conventional measurement procedure, for which a total ordering relation according to magnitude with other quantities of the same kind is defined, but for which no algebraic operations among those quantities are defined

EXAMPLE: Presence of a component in a given system when its absence is a possibility.

**ordinal scale**: scale with an ordered set of possible values for quantities of a given kind that are each a word or symbol used for ranking according to magnitude, but where differences or ratios between values have no arithmetic meaning [after 16]

EXAMPLE: Arbitrary concentration of cannabinoid in urine ("not detected"; "detected" or 0 1).

**property**: set of data elements (system, component, kind-of-property) common to a set of particular properties

Information about identification, time, and result is not considered [18].

EXAMPLE: Substance concentration of glucose in blood plasma.

NOTE 1: Information about identification, time, and result is not considered.

NOTE 2: The term “substance concentration” is a short form for amount-of-substance concentration; “amount concentration” is also used elsewhere in IUPAC [18].

**quantity**: attribute of a phenomenon, body, or substance that may be distinguished qualitatively and determined quantitatively [17]

**rational quantity**: quantity that can be divided by another quantity of the same kind

**rational scale**: scale with an ordered set of possible values for quantities of a given kind that are each a product of numerical value and unit of measurement such that a given ratio between values corresponds to the same ratio between magnitudes of the quantities along the scale [after 18]

EXAMPLE: 0 0,1 0,2 - - - 31 32 µmol/l for amount-of-substance concentration.

**system**: arbitrarily defined part of the universe, regardless of form or size [18]

EXAMPLES: A portion of urine, a portion of blood for amount-of-substance concentration.

NOTE: System is defined in the IUPAC “Gold Book” [18] in different words which do not refer to the arrangements, relationships, and processes which help to define any given system.

**taxon**: kind-of-property of a nominal property

EXAMPLES: Chemical species such as chromium(III) and chromium(VI) given on a nominal scale.

**toxicant**: material causing injury to a living organism as a result of physicochemical interaction

NOTE: Synonyms are “chemical etiologic agent”, “poison”, “toxic substance”, “toxic chemical”, and “toxic material”.

**unit (of measurement)**: particular quantity, defined and adopted by convention, with which other quantities of the same kind are compared in order to express their magnitudes relative to that quantity. Units have conventionally assigned names and symbols [18].

**unitary quantity**: quantity with a magnitude expressed as a reference quantity, multiplied by a number

NOTE: “Unitary quantity” comprises “differential quantity” and “rational quantity”.
STANDARDIZED REQUEST AND REPORT OF CLINICAL LABORATORY RESULTS

The parts of a request and a report are presented in Table 1. Essential for a request (Table 1) are parts 1 and 2, covering information on patient identification, time or time interval for sampling, and information on the property requested. The laboratory report comprises the three subdivisions 1, 2, and 3. To each element in part 2 may be added a specification as a parenthetic suffix for clarification and to avoid ambiguity. Notes may be added as part 4 with details on findings, interpretation of results, or other. Thus, the elements of the designation of a property comprise:

\[
\text{System(specification)} - \text{Component(specification)}; \text{kind-of-property(specification)}
\]

The parts comprised in the concept of “term of property” and in the concept of “term of a result” are presented in Table 1.

### Table 1 Systematic request and report.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identification and time</td>
</tr>
<tr>
<td>1.1</td>
<td>Object or patient identification</td>
</tr>
<tr>
<td>1.2</td>
<td>Date and time(s) of sampling</td>
</tr>
<tr>
<td>2</td>
<td>Property</td>
</tr>
<tr>
<td>2.1</td>
<td>System(specification)</td>
</tr>
<tr>
<td>2.2</td>
<td>Component(specification)</td>
</tr>
<tr>
<td>2.3</td>
<td>Kind-of-property(specification) or kind-of-quantity(specification)</td>
</tr>
<tr>
<td>3</td>
<td>Property value</td>
</tr>
<tr>
<td>3.1</td>
<td>Equality, inequality, or other operator</td>
</tr>
<tr>
<td>3.2</td>
<td>Numerical value multiplied by a measurement unit (for unitary quantities) or numerical value and another type of reference (for ordinal quantities) or nominal value (for nominal properties)</td>
</tr>
<tr>
<td>3.3</td>
<td>Prefix of coherent measurement unit (for unitary properties)</td>
</tr>
<tr>
<td>3.4</td>
<td>Coherent measurement unit (for unitary properties)</td>
</tr>
<tr>
<td>4</td>
<td>Notes</td>
</tr>
</tbody>
</table>

By convention, properties and results of examinations are connected through an operator.

Essential for a request are parts 1 and 2, that is information on patient identification, time or time interval for sampling, and information on the property requested.

The laboratory report on a particular property comprises the three parts 1, 2, and 3.

To each item in part 2 may be added a specification as a parenthetic suffix for clarification, identification, and to avoid ambiguity.

Notes (part 4) relating to, for example, diagnosis, medication, hemolysis, or hardware breakdown are not included here, except when needed for the interpretation of results such as pretreatment of patient or subject or the inferred intake of toxicants from identification of metabolites in secretion or excretion. Such notes are outside the scope of this document.

Thus, the items of a term for a type of property comprise terms for: System(specification)—Component(specification); kind-of-property(specification in the form of procedural details).

All of the above are as recommended by IFCC and IUPAC [10] and by the European Prestandard ENV 1614:1995 [16].

The items of a result comprise: an operator (\(= < \leq > \geq \) etc.), and, when applicable, a numerical value, a prefix and a coherent unit, usually in symbolic form. This is as recommended by the European Prestandard ENV 12435:1996 [21].
EXAMPLE

\[ \text{subst.c.} = 6 \mu \text{mol/l} \text{ (prefix } \mu: \text{ micro } 10^{-6}) \].

(A question mark supplants the numerical value in the lists.)

Nominal and ordinal scale values carry no unit. In differential and rational scales, the unit must never be omitted in reporting results, except for the unit 1.

Modern metrology further demands that the result includes or refers to a value for a measure of uncertainty [16].

The terms for components are generally given as IUPAC names [21–24]. Otherwise, the terms for components are from the International Nonproprietary Names (INN) of WHO [25] for pharmaceutical substances (English, French, Russian, and Spanish). If not recorded in INN, preference is for trivial names [26], USAN [27], BAN [28], Martindale [29], in that sequence. For pesticides, the names are mostly ISO common names [30–36], and in exceptional cases common names from British Standards [37]. Both kinds of names are listed in the “Index of Common Names of Pesticides” available at <http://www.hclrss.demon.co.uk>. It is recommended that element names be spelled out in full as elemental symbols may not always be known by medical personnel. The oxidation state of an element is given in superscript in Roman numerals following the element symbol or as a Roman numeral in parentheses following the term, when relevant.

In addition to the full systematic term for the property, an abbreviated form is given and an example and other relevant information may also be given.

For details, see IFCC–IUPAC, “Syntax and semantic rules (Recommendations 1995)” [1].

Most toxicants are metabolized by the organism. Therefore, the component may be given as a parent compound plus relevant metabolites; often, the non-modified toxicant is hardly detectable.

STRUCTURE OF AN ENTRY [15]

The mandatory terms are given in bold, that is: the systematic term for the type of property, the unit, and the code value.

1. **Term for the system and parenthetic specification** spelled out in full, and followed by a long dash (em dash)

2. **Alphanumeric chemical prefixes of component term** (when relevant)

3. **Recommended term for component and parenthetic specification**, shifted to the left for alphabetical sorting and searching, and followed by a semicolon. The recommended names given have been adopted by the CNPU database. Where the term for the entry is not an IUPAC term, or where, although being an IUPAC term, another IUPAC term for also frequently used, the first term (in bold) in the list of “Other term(s)” is an IUPAC term. Other authorities for nomenclature used are given in item 10.

4. **Kind-of-property or kind-of-quantity and parenthetic specification**

   If the term for a property is used as a header for a set of related properties, this is indicated by “list” in the parenthesis.

5. **Measurement unit (prefix and coherent unit)** when relevant

   6. Molar mass \( (M) \) or atomic mass \( (A) \) as appropriate for conversion from other units when relevant

   7. Presently recommended calibrator (not given in this document)

   8. Previous calibrator(s) (not given in this document)

   9. Other term(s) for components with IUPAC name first in bold text if not already used in items 2 and 3 as the main heading nomenclature

10. Authority: Source of main nomenclature for items 2 and 3 if not IUPAC

11. Note(s): Chemical Abstracts Service (CAS) registry number allocated as a unique identifier of a given substance together with any further information

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12. [NPUXXXXX]. Code value, intended for interlaboratory transmission between databases
13. Example in abbreviated form

In clinical chemistry, a less well defined “in-house” or a regional calibrator is often referred to and is expressed in “arbitrary unit per liter” in order to enable comparison of patient data over time and regionally. In each of these instances, further information should be given in the parenthesis to kind-of-property (item 4) as “procedure”. This could be information on the calibrator used, e.g., “BCR/CRM148/149R” or it could refer to an in-house document “procedure xx” which is available on request.

In the examples given, a question mark, “?”, has been used to represent a nominal property value or a numerical property value.

EXAMPLES

a. Nominal property

1. Urine—
3. Amfetamine and analogue;
4. taxon(procedure)
6. M(amfetamine) = 135.21 g/mol
10. Authority: INN
11. Note(s): CAS 300-62-9 (amfetamine); Molar mass for amfetamine; Analogues are BDB; Ephedrine; Fenfluramine; MBDB; Metamfetamine; 3,4-Methylenedioxyamfetamine; 3,4-Metylenedioxyethylamfetamine; Pseudoephedrine
12. NPU08980
13. U—Amfetamine and analogue; taxon(proc.) = ?

b. Ordinal quantity

In the actual reporting, the possible scale values should be listed in the parentheses after the kind-of-property. Not detected is here given as zero (0) and detected as one (1).

1. Urine—
3. Barbiturate;
4. arbitrary concentration(list; 0 1; procedure)
6. M(barbituric acid) = 128.09 g/mol
11. Note(s): CAS 67-52-7 (barbituric acid); Molar mass for barbituric acid
12. NPU04826
13. U—Barbiturate; arb.c.(list; 0 1; proc.)
   NPU01343 U—Barbital; arb.c.(0 1; proc.) = ?
   NPU04769 U—Butabarbital; arb.c(0 1; proc.) = ?
   NPU03042 U—Pentobarbital; arb.c.(0 1; proc.) = ?
   NPU03063 U—Phenobarbital; arb.c. (0 1; proc.) = ?
   NPU08677 U—Thiopental; arb.c.(0 1; proc.) = ?

1. Urine—
3. Testosterone/Epitestosterone;
4. substance ratio increment(IOC 95; dates)
9. Other term(s): 17β-Hydroxyandrost-4-en-3-one/17α-Hydroxyandrost-4-en-3-one
10. Authority: INN
11. Note(s): CAS 58-22-0/481-30-1
12. **NPU04402**
13. U—Testosterone/Epitestosterone; subst.ratio incr.(IOC95; 1995-03-21) = 8.3

**d. Rational quantity**

1. Blood—
2. Acetaldehyde;
4. substance concentration
5. micromole/litre
6. \( M = 44.05 \) g/mol
9. Other term(s): Acetic aldehyde; Ethanal; Ethyl aldehyde
11. Note(s): CAS 75-07-0
12. **NPU01005**
13. B—Acetaldehyde; subst.c. = ? µmol/l

**REFERENCES**


INDEX OF ABBREVIATIONS AND ACRONYMS

ACGIH  American Conference of Governmental Industrial Hygienists
amb  ambient
arb.c.  arbitrary concentration
B  blood
BAN  British approved name
BCR  Community Bureau of Reference (Bureau Communitaire de Référence)
CAS  Chemical Abstracts Service
C-BGE  Committee on Blood, Gas, and Electrolytes
CEN  European Committee for Standardization (Comité Européen de Normalisation)
C-NPU  Commission on Nomenclature, Properties and Units
ENV  European Prestandard
EU  European Union
IFCC  International Federation of Clinical Chemistry and Laboratory Medicine
INN  International Nonproprietary Names of WHO (approved)
*INN  International Nonproprietary Names of WHO (for name to be approved)
IRMM  Institute for Reference Materials and Measurements
ISO  International Standards Organization
IUPAC  International Union of Pure and Applied Chemistry
JRC  Joint Research Centre (EU)
L:D  length:diameter (aspect ratio)
NPU  Nomenclature, Properties and Units
P  plasma
P(arterial blood)
PIN  preferred IUPAC nomenclature
PNOR  particulates not otherwise regulated
PNOS  particulates not otherwise specified
subst.c.  substance concentration
U  urine
USAN  United States adopted name
WHO  World Health Organization

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# LIST OF PROPERTIES IN CLINICAL AND ENVIRONMENTAL HUMAN TOXICOLOGY

In this list, properties for each substance are listed alphabetically according to the first component term in the CNPU database. The first component term is normally the IUPAC name or the ISO name, but sometimes a name which is the most widely used in clinical chemistry has been chosen. Where the first component term for the entry in the list of properties is an IUPAC name, no further authority is given. Where the first component term in the entry is not an IUPAC name, or although it is an IUPAC name, another IUPAC name is also frequently used, the first name (in bold) in the list of “Other term(s)” is an IUPAC name. The other names in this list are in alphabetical order, are not necessarily comprehensive, and are given without any suggestion of approval, in order to facilitate identification of substances referred to by these names in certain circumstances. The NPU codes given include new codes given to properties relating to trace elements where the speciation of the elements has been described more fully than in the previous publication cited as ref. [8] above.

<table>
<thead>
<tr>
<th>Air(ambient)—</th>
<th>Water(drinking)—</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaldehyde;</td>
<td>Acetaldehyde; subst. c. = ? µmol/l</td>
</tr>
<tr>
<td>substance concentration</td>
<td></td>
</tr>
<tr>
<td>millimole/cubic metre</td>
<td></td>
</tr>
<tr>
<td>$M = 44.05 \text{ g/mol}$</td>
<td></td>
</tr>
<tr>
<td>Other term(s): Acetic aldehyde; Ethanal; Ethyl aldehyde</td>
<td></td>
</tr>
<tr>
<td>Note(s): CAS 75-07-0</td>
<td></td>
</tr>
<tr>
<td>NPU16486</td>
<td></td>
</tr>
<tr>
<td>Air(amb)—Acetaldehyde; subst.c. = ? mmol/m$^3$</td>
<td></td>
</tr>
</tbody>
</table>

| Blood— | |
| Acetaldehyde; | |
| substance concentration | |
| micromole/litre | |
| $M = 44.05 \text{ g/mol}$ | |
| Other term(s): Acetic aldehyde; Ethanal; Ethyl aldehyde | |
| Note(s): CAS 75-07-0 | |
| NPU01005 | |
| B—Acetaldehyde; subst.c. = ? µmol/l | |

| Urine— | |
| Acetaldehyde; | |
| substance concentration | |
| micromole/litre | |
| $M = 44.05 \text{ g/mol}$ | |
| Other term(s): Acetic aldehyde; Ethanal; Ethyl aldehyde | |
| Note(s): CAS 75-07-0 | |
| NPU01006 | |
| U—Acetaldehyde; subst.c. = ? µmol/l | |

| Water(drinking)— | |
| Acetaldehyde; | |
| substance concentration | |
| micromole/litre | |
| $M = 44.05 \text{ g/mol}$ | |
| Other term(s): Acetic aldehyde; Ethanal; Ethyl aldehyde | |
| Note(s): CAS 75-07-0 | |
| NPU16487 | |
Note(s): CAS 67-64-1
NPU16491
Water(drinking)—Acetone; subst.c. = ? µmol/l

Air(ambient)—

Acetonitrile;
substance concentration
millimole/cubic metre

$M = 41.05 \text{ g/mol}$

Other term(s): Cyanomethane; Ethyl nitrile; Methyl cyanide

Note(s): CAS 75-05-8
NPU16492
Air(amb)—Acetonitrile; subst.c. = ? mmol/m$^3$

Water(drinking)—

Acetonitrile;
substance concentration
micromole/litre

$M = 41.05 \text{ g/mol}$

Other term(s): Cyanomethane; Ethanenitrile; Ethyl nitrile; Methyl cyanide

Note(s): CAS 75-05-8
NPU16493
Water(drinking)—Acetonitrile; subst.c. = ? µmol/l

Urine—

6-O-Acetylmorphine;
substance concentration
micromole/litre

$M = 343.39 \text{ g/mol}$

Other term(s): Acetyl morphine; MAM; Monoacetyl morphine

Authority: INN

Note(s): CAS 2784-73-8
NPU16494
Urine—6-O-Acetylmorphine; subst.c. = µmol/l

Air(ambient)—

Acrolein;
substance concentration
millimole/cubic metre

$M = 56.06 \text{ g/mol}$

Other term(s): Prop-2-enal; Acraldehyde; Acrylaldehyde; Acrylic aldehyde; Allyl aldehyde; Propenal

Note(s): CAS 107-02-08
NPU16495
Air(amb)—Acrolein; subst.c. = ? mmol/m$^3$

Water(drinking)

Acrolein;
substance concentration
micromole/litre

$M = 56.06 \text{ g/mol}$

Other term(s): Prop-2-enal; Acraldehyde; Acrylaldehyde; Acrylic aldehyde; Allyl aldehyde; Propenal

Note(s): CAS 107-02-08
NPU16496
Water(drinking)—Acrolein; subst.c. = ? µmol/l

Air(ambient)—

Acrylamide;
substance concentration
millimole/cubic metre

$M = 71.08 \text{ g/mol}$

Other term(s): Prop-2-enamide; Acrylamide monomer; Acrylic amide; 2-Propenamide

Note(s): CAS 79-06-1
NPU16497
Air(amb)—Acrylamide; subst.c. = ? mmol/m$^3$

Plasma—

Acrylamide;
substance concentration
micromole/litre

$M = 71.08 \text{ g/mol}$

Other term(s): Prop-2-enamide; Acrylamide monomer; Acrylic amide; 2-Propenamide

Note(s): CAS 79-06-1
NPU16886
P—Acrylamide; subst.c. = µmol/l

Urine—

Acrylamide;
substance concentration
micromole/litre

$M = 71.08 \text{ g/mol}$

Other term(s): Prop-2-enamide; Acrylamide monomer; Acrylic amide; 2-Propenamide

Note(s): CAS 79-06-1
NPU16498
U—Acrylamide; subst.c. = µmol/l

Water(drinking)—

Acrylamide;
substance concentration
micromole/litre

$M = 71.08 \text{ g/mol}$

Other term(s): Prop-2-enamide; Acrylamide monomer; Acrylic amide; 2-Propenamide

Note(s): CAS 79-06-1
NPU16499
Water(drinking)—Acrylamide; subst.c. = µmol/l

Air(ambient)—

Acrylate;
substance concentration
millimole/cubic metre

$M(\text{acrylic acid}) = 71.06 \text{ g/mol}$

Other term(s): Prop-2-enoate; Acroleate; Aqueous acrylate; Ethyleneacrylate; 2-Propenoate

Note(s): CAS 79-10-7 (acrylic acid)
NPU16500
Air(amb)—Acrylate; subst.c. = ? mmol/m$^3$
Water (drinking)—
Acrylate;
substance concentration
micromole/litre
\( M (\text{acrylic acid}) = 71.06 \text{ g/mol} \)
Other term(s): Prop-2-enoate; Acroleate; Aqueous acrylate; Ethyleneacrylate; 2-Propenoate
Note(s): CAS 79-10-7 (acrylic acid)
NPU16501
Water (drinking)—Acrylate; subst. c. = ? µmol/l

Air (ambient)—
Acrylonitrile;
substance concentration
millimole/cubic metre
\( M = 53.06 \text{ g/mol} \)
Other term(s): Prop-2-enenitrile; Acrylonitrile monomer; AN; Cyanooethylene; 2-Propenenitrile; VCN; Vinyl cyanide
Note(s): CAS 107-13-1
NPU16502
Air (ambient)—Acrylonitrile; subst. c. = ? mmol/m³

Water (drinking)—
Acrylonitrile;
substance concentration
micromole/litre
\( M = 53.06 \text{ g/mol} \)
Other term(s): Prop-2-enenitrile; Acrylonitrile monomer; AN; Cyanooethylene; 2-Propenenitrile; VCN; Vinyl cyanide
Note(s): CAS 107-13-1
NPU16503
Air (ambient)—Acrylonitrile; subst. c. = ? µmol/l

Food (specification)—
Aflatoxin \( \text{B}_1 \);
substance content
nmole/kilogram
\( M = 312.28 \text{ g/mol} \)
Other term(s): \((6aR,9aS)-4\text{-methoxy}-2,3,6a,9a\text{-tetrahydropyrrolo}[c]furo[3′,2′:4,5]furo[2,3-h]\text{chromene}-1,11\text{-dione}\)
Note(s): CAS 1162-65-8
NPU16504
Food (specification)—Aflatoxin \( \text{B}_1 \); subst. cont. = ? nmol/kg

Food (specification)—
Aflatoxin \( \text{B}_2 \);
substance content
nmole/kilogram
\( M = 314.08 \text{ g/mol} \)
Other term(s): \((6aR,9aS)-4\text{-methoxy}-2,3,6a,8,9\text{-hexahydropyrrolo}[c]furo[3′,2′:4,5]furo[2,3-h]\text{chromene}-1,11\text{-dione}\)
Note(s): CAS 7220-81-7
NPU16505

Food (specification)—Aflatoxin \( \text{B}_2 \); subst. cont. = ? nmol/kg

Air (ambient)—
Aldicarb;
substance concentration
micromole/litre
\( M = 190.27 \text{ g/mol} \)
Other term(s): (\(EZ\))-2-Methyl-2-(methylsulfanyl)propionaldehyde
\(O\)-(methylcarbamoyl)oxime;
(\(EZ\))-2-Methyl-2-(methylthio)propionaldehyde
\(O\)-(methylcarbamoyl)oxime
Authority: ISO
Note(s): CAS 116-06-3
NPU16506
Food (specification)—Aldicarb; subst. c. = ? µmol/kg

Water (drinking)—
Aldicarb;
substance concentration
micromole/litre
\( M = 190.27 \text{ g/mol} \)
Other term(s): (\(EZ\))-2-Methyl-2-(methylsulfanyl)propionaldehyde
\(O\)-(methylcarbamoyl)oxime;
(\(EZ\))-2-Methyl-2-(methylthio)propionaldehyde
\(O\)-(methylcarbamoyl)oxime
Authority: ISO
Note(s): CAS 116-06-3
NPU16507
Water (drinking)—Aldicarb; subst. c. = ? µmol/l

Air (ambient)—
Aldrin;
substance concentration
millimole/cubic metre
\( M = 364.92 \text{ g/mol} \)
Other term(s): \(1R,4S,4aS,5S,8R,8aR\)-1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydrindane-1,4,5,8-dimethanocyclonaphthalene;
Aldrine; Compound 118; HHDN; Octalene
Authority: ISO
Note(s): CAS 309-00-2
NPU16508
Air (ambient)—Aldrin; subst. c. = ? mmol/m³

Blood—
Aldrin;
substance concentration
micromole/litre
\( M = 364.92 \text{ g/mol} \)
Other term(s): \(1R,4S,4aS,5S,8R,8aR\)-1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydrindane-1,4,5,8-dimethanocyclonaphthalene;
Aldrine; Compound 118; HHDN; Octalene
Authority: ISO
Note(s): CAS 309-00-2
Blood—Aldrin; subst. c. = \( ? \mu\text{mol/l} \)

Food(specification)—Aldrin;

substance content
micromole/kg

\( M = 364.92 \text{ g/mol} \)

Other term(s): (1\(R\),4\(S\),4a\(S\),5\(S\),8\(R\),8a\(R\))-1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-dimethanonaphthalene; Aldrine; Compound 118; HHDN; Octalene

Authority: ISO

Note(s): CAS 309-00-2

NPU16510

Food(specification)—Alldrin; subst. cont. = \( ? \mu\text{mol/kg} \)

Water(drinking)—Aldrin;

substance concentration
micromole/litre

\( M = 364.92 \text{ g/mol} \)

Other term(s): (1\(R\),4\(S\),4a\(S\),5\(S\),8\(R\),8a\(R\))-1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-dimethanonaphthalene; Aldrine; Compound 118; HHDN; Octalene

Authority: ISO

Note(s): CAS 309-00-2

NPU16511

Water(drinking)—Alldrin; subst. c. = \( ? \mu\text{mol/l} \)

Air(ambient)—Allethrin;

substance concentration
millimole/cubic metre

\( A = 26.98 \text{ g/mol} \)

Other term(s): \((RS)-3\text{-Allyl}-2\text{-methyl}-4\text{-oxocyclopent-2-enyl} (1\(R\),3\(R\),1\(R\),3\(S\))-2,2-dimethyl-3-(2-methylprop-1-en-1-yl)cyclopropane-1-carboxylate; Alethrin I; Bioallethrin; Depallethrin

Authority: ISO

Note(s): CAS 584-79-2

NPU16514

Air(ambient)—Allethrin; subst. c. = \( ? \mu\text{mol/l} \)

Cells(blood)—Aluminium(III);

substance content
micromole/kg

\( A = 26.98 \text{ g/mol} \)

Other term(s): Aluminium(total)

Note(s): CAS 7429-90-5 (element); Atomic mass for elemental aluminium

NPU01155

Cells(B)—Aluminium(III); subst. cont. = \( ? \mu\text{mol/m}^3 \)

Plasma—Aluminium(III);

substance concentration
micromole/litre

\( A = 26.98 \text{ g/mol} \)

Other term(s): Aluminium(total)

Note(s): CAS 7429-90-5 (element); Atomic mass for elemental aluminium

NPU16692

P—Aluminium(III); subst. c. = \( ? \mu\text{mol/l} \)

Urine—Aluminium(III);

substance concentration
micromole/litre

\( A = 26.98 \text{ g/mol} \)

Other term(s): Aluminium(total)

Note(s): CAS 7429-90-5 (element); Atomic mass for elemental aluminium

NPU16692

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NPU16893
U—Aluminium(III); subst.c. = ? µmol/l

Water(drinking)—
Aluminium(III);
substance concentration
micromole/litre
A = 26.98 g/mol
Other term(s): Aluminium(total)
Note(s): CAS 7429-90-5 (element); Atomic mass for elemental aluminium
NPU16516
Water(drinking)—Aluminium(III); subst.c. = ? µmol/l

Plasma—
alpha-
Amanitin;
substance concentration
micromole/litre
M = 918.98 g/mol
Authority: INN
Note(s): CAS 23109-05-9
NPU16517
P—alpha-Amanitin; subst.c. = ? µmol/l

Urine—
alpha-
Amanitin;
substance concentration
micromole/litre
M = 918.98 g/mol
Authority: INN
Note(s): CAS 23109-05-9
NPU16518
U—alpha-Amanitin; subst.c. = ? µmol/l

Plasma—
beta-
Amanitin;
substance concentration
micromole/litre
M = 919.97 g/mol
Authority: INN
Note(s): CAS 13567-07-2; 21150-22-1
NPU16519
P—beta-Amanitin; subst.c. = ? µmol/l

Urine—
beta-
Amanitin;
substance concentration
micromole/litre
M = 919.97 g/mol
Authority: INN
Note(s): CAS 13567-07-2; 21150-22-1
NPU16520
U—beta-Amanitin; subst.c. = ? µmol/l

Plasma—
gamma-
Amanitin;
substance concentration
micromole/litre
M = 902.98 g/mol
Authority: INN
Note(s): CAS 13567-11-8; 21150-23-2
NPU16521
S—gamma-Amanitin; subst.c. = ? µmol/l

Urine—
gamma-
Amanitin;
substance concentration
micromole/litre
M = 902.98 g/mol
Authority: INN
Note(s): CAS 13567-11-8; 21150-23-2
NPU16522
U—gamma-Amanitin; subst.c. = ? µmol/l

Amfetamine;
arbitrary concentration(0 1; procedure)
M = 135.21 g/mol
Other term(s): (RS)-1-Phenylpropan-2-amine;
Actedron; Adipan; Allodene;
β-aminopropanilbenzene; Amphetamine; Durophet;
Elastonon; Isoamyne; Isomyn; Mecodrin;
DL-α-Methylphenethylamine; Norephedrane;
Novydrine; Ortedrine; Phenedrine; 1-Phenyl-2-
aminopropane; (Phenylisopropyl)amine;
Profamina; Propisamine; Psychedrine;
Sympamine; Sympatedrin; Sympatedrine
Authority: INN
Note(s): CAS 300-62-9
NPU01163
U—DL-Amfetamine; arb.c.(0 1; proc.) = ? µmol/l

Urine—
DL-
Amfetamine;
substance concentration
micromole/litre
M = 135.21 g/mol
Other term(s): (RS)-1-Phenylpropan-2-amine;
Actedron; Adipan; Allodene;
β-aminopropanilbenzene; Amphetamine; Durophet;
Elastonon; Isoamyne; Isomyn; Mecodrin;
DL-α-Methylphenethylamine; Norephedrane;
Novydrine; Ortedrine; Phenedrine; 1-Phenyl-2-
aminopropane; (Phenylisopropyl)amine;
Profamina; Propisamine; Psychedrine;
Sympamine; Sympatedrin; Sympatedrine
Authority: INN
Note(s): CAS 300-62-9
NPU01166
U—DL-Amfetamine; subst.c. = ? µmol/l
Urine—
Amfetamine and analogue;
*arbitrary concentration*(0 1; procedure)
\(M(\text{Amfetamine}) = 135.21 \text{ g/mol}\)
Authority: INN
Note(s): CAS 300-62-9 (amfetamine); Analogues are BDB; Ephedrine; Fenfluramine; MBDB;
Metamfetamine; 3,4-Methylenedioxymetamphetamine;
3,4-Methylenedioxymethylamphetamine;
Pseudoephedrine
NPU08960
U—Amfetamine and analogue; arb.c.(0 1; proc.) = ?

Urine—
Amfetamine and analogue;
taxon*(procedure)*
\(M(\text{Amfetamine}) = 135.21 \text{ g/mol}\)
Authority: INN
Note(s): CAS 300-62-9 (amfetamine); Analogues are BDB; Ephedrine; Fenfluramine; MBDB;
Metamfetamine; 3,4-Methylenedioxymetamphetamine;
3,4-Methylenedioxymethylamphetamine;
Pseudoephedrine
NPU08980
U—Amfetamine and analogue; taxon(proc.) = ?

Urine—
Amfetaminil;
*arbitrary concentration*(0 1; procedure)
\(M(\text{Amfetaminil}) = 250.34 \text{ g/mol}\)

Other term(s):
2-Phenyl-2-(1-phenylpropan-2-ylamino)acetonitrile; Amphetaminil;
\(N-(\alpha\text{-Methylphenethyl})-2\text{-phenylglycinyl}nitrile\)
Authority: INN
Note(s): CAS 17590-01-1
NPU04913
U—Amfetaminil; arb.c.(0 1; proc.) = ?

Urine—
Amfetaminil;
*substance concentration*
micro mole/litre
\(M = 250.34 \text{ g/mol}\)
Other term(s):
2-Phenyl-2-(1-phenylpropan-2-ylamino)acetonitrile; Amphetaminil;
\(N-(\alpha\text{-Methylphenethyl})-2\text{-phenylglycinyl}nitrile\)
Authority: INN
Note(s): CAS 17590-01-1
NPU01169
U—Amfetaminil; subst.c. = ? µmol/l

Air(ambient)—
Amitrole;
*substance concentration*
micro mole/litre
\(M = 84.08 \text{ g/mol}\)
Other term(s): 1\(H\)-1,2,4-triazolo-3-amine;
Aminotriazole
Authority: ISO
Note(s): CAS 61-82-5
NPU16524
Air(amb)—Amitrole; subst.c. = ? mmol/m^3

Food*(specification)*—
Amitrole;
*substance content*
micro mole/kg
\(M = 84.08 \text{ g/mol}\)
Other term(s): 1\(H\)-1,2,4-triazolo-3-amine;
Aminotriazole
Authority: ISO
Note(s): CAS 61-82-5
NPU16525
Food(specification)—Amitrole; subst.cont. = ? µmol/kg

Urine—
Amitrole;
*substance concentration*
nanomole/litre
\(M = 84.08 \text{ g/mol}\)
Other term(s): 1\(H\)-1,2,4-triazolo-3-amine;
Aminotriazole
Authority: ISO
Note(s): CAS 61-82-5
NPU16526
Water(drinking)—Amitrole; subst.c. = ? µmol/l

Air(ambient)—
Ammonia;
*substance concentration*
millimole/cubic metre
\(M = 17.04 \text{ g/mol}\)
Note(s): CAS 7664-41-7
NPU16527
Air(amb)—Ammonia; subst.c. = ? mmol/m^3

Plasma—
Ammonium;
*substance concentration*
micro mole/litre
\(M = 18.04 \text{ g/mol}\)
Note(s): CAS 7664-41-7 (ammonia)
NPU03928
P—Ammonium; subst.c. = ? µmol/l

Plasma (arterial blood)—
Ammonium;
substance concentration
micromole/litre
$M = 18.04 \text{ g/mol}$
Note(s): CAS 7664-41-7 (ammonia)
NPU01226
P(aB)—Ammonium; subst.c. = ? µmol/l

Urine—
Ammonium;
substance concentration
micromole/litre
$M = 18.04 \text{ g/mol}$
Note(s): CAS 7664-41-7 (ammonia)
NPU01227
U—Ammonium; subst.c. = ? µmol/l

Water (drinking)—
Ammonium;
substance concentration
micromole/litre
$M = 18.04 \text{ g/mol}$
Note(s): CAS 7664-41-7 (ammonia)
NPU16528
Water (drinking)—Ammonium; subst.c. = ? µmol/l

Air (ambient)—
Antimony (0, III and V);
substance concentration
micromole/cubic metre
$A = 121.75 \text{ g/mol}$
Other term(s): Antimony (total)
Note(s): CAS 7440-36-0 (element); Atomic mass for elemental antimony
NPU16529
Air (amb)—Antimony (0, III and V); subst.c. = ? µmol/m$^3$

Blood—
Antimony (III and V);
substance concentration
nanomole/litre
$A = 121.75 \text{ g/mol}$
Other term(s): Antimony (total)
Note(s): CAS 7440-36-0 (element); Atomic mass for elemental antimony
NPU16894
B—Antimony (III and V); subst.c. = ? nmol/l

Plasma—
Antimony (III and V);
substance concentration
nanomole/litre
$A = 121.75 \text{ g/mol}$
Other term(s): Antimony (total)

Note(s): CAS 7440-36-0 (element); Atomic mass for elemental antimony
NPU01274
P—Antimony (III and V); subst.c. = ? nmol/l

Urine—
Antimony (III and V);
substance concentration
nanomole/litre
$A = 121.75 \text{ g/mol}$
Other term(s): Antimony (total)
Note(s): CAS 7440-36-0 (element); Atomic mass for elemental antimony
NPU16530
U—Antimony (III and V); subst.c. = ? nmol/l

Water (drinking)—
Antimony (III and V);
substance concentration
nanomole/litre
$A = 121.75 \text{ g/mol}$
Other term(s): Antimony (total)
Note(s): CAS 7440-36-0 (element); Atomic mass for elemental antimony
NPU16531
Water (drinking)—Antimony (III and V); subst.c. = ? nmol/l

Air (ambient)—
Antimony trihydride;
substance concentration
micromole/cubic metre
$M = 124.78 \text{ g/mol}$
Other term(s): Antimony hydride; Hydrogen antimonide; Stibine
Note(s): CAS 7803-52-3
NPU16825
Air (amb)—Antimony trihydride; subst.c. = ? µmol/m$^3$

Water (drinking)—
Antimony trihydride;
substance concentration
nanomole/litre
$M = 124.78 \text{ g/mol}$
Other term(s): Antimony hydride; Hydrogen antimonide; Stibine
Note(s): CAS 7803-52-3
NPU16826
Water (drinking)—Antimony trihydride; subst.c. = ? nmol/l

Air (ambient)—
Arsenic (III and V) inorganic and organically bound;
substance concentration
micromole/cubic metre
$A = 74.92 \text{ g/mol}$
Other term(s): Arsenic (total)
Note(s): CAS 7440-38-2 (element); Atomic mass for elemental arsenic

**Air(amb)—Arsenic((III and V) inorganic and organically bound); subst.c. = ? µmol/m³**

**Blood—**

**Arsenic((III and V) inorganic and organically bound);**

**substance concentration**

**nanomole/litre**

\[ A = \text{74.92 g/mol} \]

Other term(s): Arsenic(total)

Note(s): CAS 7440-38-2 (element); Atomic mass for elemental arsenic

**NPU16896**

**B—Arsenic((III and V, inorganic and organically bound); subst.c. = ? nmol/l**

**Cells(blood)—**

**Arsenic((III and V) inorganic and organically bound);**

**substance content**

**nanomole/kilogram**

\[ A = \text{74.92 g/mol} \]

Other term(s): Arsenic(total)

Note(s): CAS 7440-38-2 (element); Atomic mass for elemental arsenic

**NPU16946**

**Cells(b)—Arsenic((III and V) inorganic and organically bound); subst.cont. = ? nmol/kg**

**Hair—**

**Arsenic((III and V) inorganic and organically bound);**

**substance content**

**micromole/kilogram**

\[ A = \text{74.92 g/mol} \]

Other term(s): Arsenic(total)

Note(s): CAS 7440-38-2 (element); Atomic mass for elemental arsenic

**NPU16897**

**Hair—Arsenic((III and V) inorganic and organically bound); subst.cont. = ? µmol/kg**

**Plasma—**

**Arsenic((III and V) inorganic and organically bound);**

**substance concentration**

**nanomole/litre**

\[ A = \text{74.92 g/mol} \]

Other term(s): Arsenic(total)

Note(s): CAS 7440-38-2 (element); Atomic mass for elemental arsenic

**NPU16855**

**P—Arsenic((III and V) inorganic and organically bound); subst.c. = ? nmol/l**

**Urine—**

**Arsenic((III and V) inorganic and organically bound);**

**substance concentration**

**nanomole/litre**

\[ A = \text{74.92 g/mol} \]

Other term(s): Arsenic(total)

Note(s): CAS 7440-38-2 (element); Atomic mass for elemental arsenic

**NPU16898**

**U—Arsenic((III and V) inorganic and organically bound); subst.c. = ? nmol/l**

**Water(drinking)—**

**Arsenic((III and V) inorganic and organically bound);**

**substance concentration**

**nanomole/litre**

\[ A = \text{74.92 g/mol} \]

Other term(s): Arsenic(total)

Note(s): CAS 7440-38-2 (element); Atomic mass for elemental arsenic

**NPU16533**

**Water(drinking)—Arsenic((III and V) inorganic and organically bound); subst.c. = ? nmol/l**

**Air(ambient)—**

**Arsine;**

**substance concentration**

**micromole/cubic metre**

\[ M = \text{77.95 g/mol} \]

Other term(s): Arsenic hydride; Arsenic trihydride; Hydrogen arsenide

Authority: ISO

Note(s): CAS 7784-42-1

**NPU16534**

**Air(amb)—Arsine; subst.c. = ? µmol/m³**

**Air(ambient)—**

**Asbestos fibres(length >5 µm, aspect ratio(L:D) ≥ 3:1);**

**number concentration(procedure) reciprocal cubic metre**

Note(s): CAS 1332-21-4; Types of asbestos include Actinolite; Amosite (Cummingtonite-Grunerite); Anthophyllite; Chrysotile; Crocidolite (Riebeckite); Tremolite

**NPU16535**

**Air(amb)—Asbestos fibres(length > 5 µ m, aspect ratio(L:D) ≥ 3:1); number conc.(proc.) = ? m⁻³**

**Fluid (alveolar)—**

**Asbestos fibres(length > 5 µ m, aspect ratio(L:D) ≥ 3:1);**

**number concentration(procedure) reciprocal litre**

Note(s): CAS 1332-21-4; Types of asbestos include Actinolite; Amosite (Cummingtonite-Grunerite); Anthophyllite; Chrysotile; Crocidolite (Riebeckite); Tremolite

**NPU16535**

**Air(amb)—Asbestos fibres(length > 5 µ m, aspect ratio(L:D) ≥ 3:1); number conc.(proc.) = ? m⁻³**
Fluid(alv)—Asbestos fibres(length > 5 µm, aspect ratio(L:D) ≥ 3:1); number conc.(proc.) = ? l⁻¹

Plasma—
Barbiturate;
substance concentration(list)
M(barbituric acid) = 128.09 g/mol
Authority: INN
Note(s): CAS 67-52-7 (barbituric acid); Molar mass for barbituric acid
NPU16396
P—Barbiturate; subst.c.(list)
NPU16400 P—Barbital; subst.c. = ? nmol/l
NPU10139 P—Barbital; subst.c. = ? mmol/l
NPU03954 P—Pentobarbital; subst.c. = ? mmol/l
NPU16394 P—Pentobarbital; subst.c. = ? mmol/l
NPU03062 P—Phenobarbital; subst.c. = ? mmol/l
NPU16390 P—Phenobarbital; subst.c. = ? nmol/l

Plasma—
Barbiturate;
taxon(list; procedure)
M(barbituric acid) = 128.09 g/mol
Authority: INN
Note(s): CAS 67-52-7 (barbituric acid); Molar mass for barbituric acid
NPU01345
P—Barbiturate; taxon(list; proc.) = ?

Urine—
Barbiturate;
arbitrary concentration(list; 0 1; procedure)
M(barbituric acid) = 128.09 g/mol
Authority: INN
Note(s): CAS 67-52-7 (barbituric acid); Molar mass for barbituric acid
NPU04826
U—Barbiturate; arb.c.(list; 0 1; proc.) = ?
NPU01343 U—Barbital; arb.c.(0 1; proc.) = ?
NPU04769 U—Butabarbital; arb.c.(0 1; proc.) = ?
NPU03042 U—Pentobarbital; arb.c.(0 1; proc.) = ?
NPU03063 U—Phenobarbital; arb.c.(0 1; proc.) = ?
NPU08677 U—Thiopental; arb.c.(0 1; proc.) = ?

Urine—
Barbiturate;
taxon(list; procedure)
M(barbituric acid) = 128.09 g/mol
Authority: INN
Note(s): CAS 67-52-7 (barbituric acid); Molar mass for barbituric acid
NPU04588
U—Barbiturate; taxon(list; proc.) = ?

Air(ambient)—
Barium(II);
substance concentration(procedure)
micromole/cubic metre
A = 137.34 g/mol

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Note(s): CAS 7440-39-3 (element); Atomic mass for elemental barium

NPU16537
Air(amb)—Barium(II); subst.c.(proc.) = ? µmol/m³

Plasma—
Barium(II):
substance concentration
nanomole/litre
A = 137.34 g/mol
Note(s): CAS 7440-39-3 (element); Atomic mass for elemental barium

NPU16899
P—Barium(II); subst.c. = ? nmol/l

Urine—
Barium(II):
substance concentration
nanomole/litre
A = 137.34 g/mol
Note(s): CAS 7440-39-3 (element); Atomic mass for elemental barium

NPU16900
U—Barium(II); subst.c. = ? nmol/l

Water(drinking)—
Barium(II):
substance concentration
micromole/litre
A = 137.34 g/mol
Note(s): CAS 7440-39-3 (element); Atomic mass for elemental barium

NPU16538
Water(drinking)—Barium(II); subst.c. = ? µmol/l

Urine—
Basic drugs;
arbitrary concentration(0 1; procedure)
Other term(s): Tetrabromophenolphthalein ethyl ester reactive compounds
Note(s): Examples of basic drugs are Diphenhydramine; Doxepin; Doxylamin; Flurazepam; Maprotilin; Pipamperon

NPU16539
U—Basic drugs; arb.c.(0 1; proc.) = ?

Air(ambient)—

Benomy(II):
substance concentration
millimole/cubic metre
M = 290.36 g/mol
Other term(s): Methyl 1-(butylcarbamoyl)benzimidazol-2-ylcarbamate; Methyl 1-(butylcarbamoyl)-2-benzimidazolecarbamate
Authority: ISO
Note(s): CAS 17804-35-2

NPU16540
Air(amb)—Benomy; subst.c. = ? mmol/m³

Air(ambient)—

Benzene;
substance concentration
micromole/cubic metre
M = 78.11 g/mol
Note(s): CAS 71-43-2

NPU16541
Air(amb)—Benzene; subst.c. = ? µmol/m³

Air(exhaled)—

Benzene;
substance concentration
micromole/cubic metre
M = 78.11 g/mol
Other term(s): Benzol; Phenyl hydride
Note(s): CAS 71-43-2

NPU16542
Air(exh)—Benzene; subst.c. = ? µmol/m³

Urine—

Benzene;
substance concentration
micromole/litre
M = 78.11 g/mol
Other term(s): Benzol; Phenyl hydride
Note(s): CAS 71-43-2

NPU16543
U—Benzene; subst.c. = ? µmol/l

Water(drinking)—

Benzene;
substance concentration
micromole/litre
M = 78.11 g/mol
Other term(s): Benzol; Phenyl hydride
Note(s): CAS 71-43-2

NPU16544
Water(drinking)—Benzene; subst.c. = ? µmol/l

Urine—

Benzoylecgonine;
arbitrary concentration(0 1; procedure)
M = 289.33 g/mol
Authority: INN
Note(s): CAS 519-09-5

NPU16545
U—Benzoylecgonine; arb.c.(0 1; proc.) = ?

Air(ambient)—

Beryllium(0 and III);
substance concentration
nanomole/cubic metre
A = 9.01 g/mol
Note(s): CAS 7440-41-7 (element); Atomic mass for elemental beryllium

NPU16546
Air(amb)—Beryllium(0 and III); subst.c. = ? nmol/m³

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Plasma—
Beryllium(III);
substance concentration nanomole/litre
\( A = 9.01 \text{ g/mol} \)
Note(s): CAS 7440-41-7 (element); Atomic mass for elemental beryllium
NPU16901
P—Beryllium(III); subst.c. = ? nmol/l

Urine—
Beryllium(III);
substance concentration nanomole/litre
\( A = 9.01 \text{ g/mol} \)
Note(s): CAS 7440-41-7 (element); Atomic mass for elemental beryllium
NPU16902
U—Beryllium(III); subst.c. = ? nmol/l

Plasma—
Bismuth(III);
substance concentration nanomole/litre
\( A = 208.98 \text{ g/mol} \)
Note(s): CAS 7440-69-9 (element); Atomic mass for elemental bismuth
NPU16903
P—Bismuth(III); subst.c. = ? nmol/l

Urine—
Bismuth(III);
substance concentration nanomole/litre
\( A = 208.98 \text{ g/mol} \)
Note(s): CAS 7440-69-9 (element); Atomic mass for elemental bismuth
NPU16904
U—Bismuth(III); subst.c. = ? nmol/l

Air(ambient)—
Boron(III);
substance concentration millimole/cubic metre
\( A = 10.81 \text{ g/mol} \)
Note(s): CAS 7440-42-8 (element); Atomic mass for elemental boron
NPU16547
Air(amb)—Boron(III); subst.c. = ? mmol/m^3

Plasma—
Boron(III);
substance concentration micromole/litre
\( A = 10.81 \text{ g/mol} \)
Note(s): CAS 7440-42-8 (element); Atomic mass for elemental boron
NPU16905
P—Boron(III); subst.c. = ? µmol/l

Urine—
Boron(III);
substance concentration micromole/litre
\( A = 10.81 \text{ g/mol} \)
Note(s): CAS 7440-42-8 (element); Atomic mass for elemental boron
NPU16947
U—Boron(III); subst.c. = ? µmol/l

Water(drinking)—
Boron(III);
substance concentration millimole/litre
\( A = 10.81 \text{ g/mol} \)
Note(s): CAS 7440-42-8 (element); Atomic mass for elemental boron
NP16890
Water(drinking)—Boron(III); subst.c. = ? mmol/l

Blood—
Bromide ion;
substance concentration micromole/litre
\( A = 79.90 \text{ g/mol} \)
Note(s): CAS 7726-95-6 (element); Atomic mass for elemental bromine
NPU04834
B—Bromide ion; subst.c. = ? µmol/l

Plasma—
Bromide ion;
substance concentration micromole/litre
\( A = 79.90 \text{ g/mol} \)
Note(s): CAS 7726-95-6 (element); Atomic mass for elemental bromine
NPU01403
P—Bromide ion; subst.c. = ? µmol/l

Urine—
Bromide ion;
substance concentration micromole/litre
\( A = 79.90 \text{ g/mol} \)
Note(s): CAS 7726-95-6 (element); Atomic mass for elemental bromine
NPU04870
U—Bromide ion; subst.c. = ? µmol/l

Air(ambient)—
Bromine(gas);
substance concentration millimole/cubic metre
\( M = 158.80 \text{ g/mol} \)
Note(s): CAS 7726-95-6
NPU16548
Air(amb)—Bromine gas; subst.c. = ? mmol/m^3

Air(ambient)—
Butan-1-ol;
substance concentration
millimole/cubic metre
$M = 74.12 \text{ g/mol}$
Other term(s): $n$-Butanol; Butyl alcohol; $n$-Butyl alcohol; 1-Hydroxybutane; $n$-Propyl carbinol
Note(s): CAS 71-36-3
NPU16549
Air(amb)—Butan-1-ol; subst.c. = ? mmol/m$^3$

Water(drinking)—
Butan-1-ol;
substance concentration
micromole/litre
$M = 74.12 \text{ g/mol}$
Other term(s): $n$-Butanol; Butyl alcohol; $n$-Butyl alcohol; 1-Hydroxybutane; $n$-Propyl carbinol
Note(s): CAS 71-36-3
NPU16550
Water(drinking)—Butan-1-ol; subst.c. = ? µmol/l

Air(ambient)—
Butan-2-ol;
substance concentration
millimole/cubic metre
$M = 74.12 \text{ g/mol}$
Other term(s): sec-Butyl alcohol; Butylene hydrate; 2-Hydroxybutane; Methyl ethyl carbinol
Note(s): CAS 78-92-2
NPU16551
Air(amb)—Butan-2-ol; subst.c. = ? mmol/m$^3$

Water(drinking)—
Butan-2-ol;
substance concentration
micromole/litre
$M = 74.12 \text{ g/mol}$
Other term(s): sec-Butyl alcohol; Butylene hydrate; 2-Hydroxybutane; Methyl ethyl carbinol
Note(s): CAS 78-92-2
NPU16552
Water(drinking)—Butan-2-ol; subst.c. = ? µmol/l

Blood—
Cadmium(II);
substance concentration
nanomole/litre
$A = 112.41 \text{ g/mol}$
Note(s): CAS 7440-43-9 (element); Atomic mass for elemental cadmium
NPU16948
B—Cadmium(II); subst.c. = ? nmol/l

Cells(blood)—
Cadmium(II);
substance content
nanomole/kilogram
$A = 112.41 \text{ g/mol}$
Note(s): CAS 7440-43-9 (element); Atomic mass for elemental cadmium
NPU16949
Cells(b)—Cadmium(II); subst.cont. = ? nmol/kg

Food(specification)
Cadmium(II);
substance content
micromole/kilogram
$A = 112.41 \text{ g/mol}$
Note(s): CAS 7440-43-9 (element); Atomic mass for elemental cadmium
NPU16555
Food(specification)—Cadmium(II); subst.cont. = ? µmol/kg

Hair—
Cadmium(II);
substance content
micromole/kilogram
$A = 112.41 \text{ g/mol}$
Note(s): CAS 7440-43-9 (element); Atomic mass for elemental cadmium
NPU16906
Hair—Cadmium(II); subst.cont. = ? µmol/kg

Plasma—
Cadmium(II);
substance concentration
nanomole/litre
$A = 112.41 \text{ g/mol}$
Note(s): CAS 7440-43-9 (element); Atomic mass for elemental cadmium
NPU16907
P—Cadmium(II); subst.c. = ? nmol/l

Urine—
Cadmium(II);
substance concentration
nanomole/litre
$A = 112.41 \text{ g/mol}$
Note(s): CAS 7440-43-9 (element); Atomic mass for elemental cadmium
NPU16908
U—Cadmium(II); subst.c. = ? nmol/l

Water(drinking)—
Cadmium(II);
substance concentration
nanomole/litre
$A = 112.41 \text{ g/mol}$
Note(s): CAS 7440-43-9 (element); Atomic mass for elemental cadmium
NPU16556
Water(drinking)—Cadmium(II); subst.c. = ? nmol/l

Air(ambient)—
Cadmium((0 and II) dust);
substance concentration
micromole/cubic metre
Note(s): CAS 7440-43-9 (element); Atomic mass for elemental cadmium
NPU16949
Air(amb)—Cadmium((0 and II) dust); subst.c. = ? µmol/m$^3$
\[ A = 112.41 \text{ g/mol} \]
Note(s): CAS 7440-43-9 (element); Atomic mass for elemental cadmium

**NPU16557**
Air(amb)—Cadmium((0 and II) dust); subst.c. = ? \( \mu \text{mol/m}^3 \)

**Air(ambient)—**

**Cadmium((II) fume);**

**substance concentration**

micromole/cubic metre

\[ A = 112.41 \text{ g/mol} \]
Note(s): CAS 7440-43-9 (element); Atomic mass for elemental cadmium

**NPU16558**
Air(amb)—Cadmium((II) fume); subst.c. = ? \( \mu \text{mol/m}^3 \)

**Blood—**

**Caesium(I);**

**substance concentration**

nanomole/litre

\[ A = 132.90 \text{ g/mol} \]
Note(s): CAS 7440-46-2 (element); Atomic mass for elemental caesium

**NPU16909**
B—Caesium(I); subst.c. = ? nmol/l

**Cells(blood)—**

**Caesium(I);**

**substance content**

nanomole/kilogram

\[ A = 132.90 \text{ g/mol} \]
Note(s): CAS 7440-46-2 (element); Atomic mass for elemental caesium

**NPU16910**
Cells(b)—Caesium(I); subst. cont. = ? nmol/kg

**Plasma—**

**Caesium(I);**

**substance concentration**

nanomole/litre

\[ A = 132.90 \text{ g/mol} \]
Note(s): CAS 7440-46-2 (element); Atomic mass for elemental caesium

**NPU16911**
P—Caesium(I); subst.c. = ? nmol/l

**Urine—**

**Caesium(I);**

**substance concentration**

nanomole/litre

\[ A = 132.90 \text{ g/mol} \]
Note(s): CAS 7440-46-2 (element); Atomic mass for elemental caesium

**NPU01431**
U—Caesium(I); subst.c. = ? nmol/l

**Urine—**

**Cannabinoids;**

**arbitrary concentration(0 1; procedure)**

\[ M(\text{cannabinol}) = 310.44 \text{ g/mol} \]
Authority: INN
Note(s): CAS 521-35-7 (cannabinol); Molar mass for cannabinol; e.g., Cannabidiol; Cannabiol; Tetrahydrocannabinol

**NPU08957**
U—Cannabinoids; arb.c.(0 1; proc.) = ?

**Urine—**

**Cannabinoids;**

**substance concentration**

micromole/litre

\[ M(\text{cannabinol}) = 310.44 \text{ g/mol} \]
Authority: INN
Note(s): CAS 521-35-7 (cannabinol); Molar mass for cannabinol; e.g., Cannabidiol; Cannabiol; Tetrahydrocannabinol

**NPU04622**
U—Cannabinoids; subst.c. = ? nmol/l

**Urine—**

**Cannabinol;**

**substance concentration**

nanomole/litre

\[ M = 310.44 \text{ g/mol} \]
Note(s): CAS 521-35-7 (cannabinol)

**Other term(s):**
6,6,9-Trimethyl-3-pentyl-6\(H\)-dibenzo[b,d]pyran-1-ol; Cannabidiol; Cannabiol; Tetrahydrocannabinol

**Authority: ISO**

**NPU01452**
U—Cannabinol; subst.c. = ? nmol/l

**Air(ambient)—**

**Carbaryl;**

**substance concentration**

micromole/cubic metre

\[ M = 201.22 \text{ g/mol} \]
Note(s): CAS 63-25-2

**Other term(s):**
1-Naphthyl methylcarbamate; 1-Naphthyl N-methylcarbamate; ENT-23969; OMS-29; UC-7744; Arylam; Carylderm; Clinicide; Derbac; Dicarbam; Ravyon; Seffein; Sevin

**Authority: ISO**

**NPU16559**
Air(amb)—Carbaryl; subst.c. = ? \( \mu \text{mol/m}^3 \)

**Water(drinking)—**

**Carbaryl;**

**substance concentration**

nanomole/litre

\[ M = 201.22 \text{ g/mol} \]
Note(s): CAS 63-25-2

**Other term(s):**
1-Naphthyl methylcarbamate; 1-Naphthyl N-methylcarbamate; ENT-23969; OMS-29; UC-7744; Arylam; Carylderm; Clinicide; Derbac; Dicarbam; Ravyon; Seffein; Sevin

**Authority: ISO**

**NPU16559**
U—Cannabinol; subst.c. = ? nmol/l
Water(drinking)—Carbaryl; subst.c. = ? nmol/l

Carbendazim—
substance concentration
nanomole/litre

M = 191.19 g/mol

Other term(s): Methyl benzimidazol-2-ylcarbamate; BAS-3460; Bavistin; BCM; BMC; Carbendazim; Carbendazine; Carbendazol; Carbenazole; CTR-6699; Derosal; HOE-17411; MBC; Methyl 2-benzimidazolecarbamate

Authority: ISO

Note(s): CAS 10605-21-7

NPU16561
Water(drinking)—Carbendazim; subst.c. = ? nmol/l

Plasma—
Carbohydrate deficient transferrin
substance concentration
micromole/litre

M(transferrin) = about 80 000 g/mol

Other term(s): CDT

NPU16562
P—Carbohydrate deficient transferrin; subst.c. = ? µmol/l

Air(ambient)—
Carbon disulfide—
substance concentration
micromole/cubic metre

M = 76.14 g/mol

Other term(s): Carbon bisulfide; Carbon disulphide; Methanedithione

Note(s): CAS 75-15-0

NPU16563
Air(amb)—Carbon disulfide; subst.c. = ? µmol/m³

Air(ambient)—
Carbon monoxide—
substance concentration
millimole/cubic metre

M = 28.01 g/mol

Other term(s): Carbon oxide; Flue gas; Monoxide

Note(s): CAS 630-08-0

NPU16564
Air(amb)—Carbon monoxide; subst.c. = ? mmol/m³

Haemoglobin(total, blood)—
Carboxyhaemoglobin;
substance fraction
one

M(HbFe) = about 16 100 g/mol

Other term(s): Carbonylhaemoglobin; CO-Hemoglobin

Note(s): CAS 9061-29-4

NPU01473
Hb(total, blood)—Carboxyhaemoglobin; subst.fr. = ?

Air(ambient)—
Carbon tetrachloride—
substance concentration
millimole/cubic metre

M = 153.82 g/mol

Other term(s): Tetrachloromethane; Carbon tetrachloride; Carbon tet; Freon 10; Halon 104

Note(s): CAS 56-23-5

NPU16565
Air(amb)—Carbon tetrachloride; subst.c. = ? mmol/m³

Cerebrospinal fluid—
Chloramphenicol;
substance concentration
micromole/litre

M = 323.14 g/mol

Other term(s): 2,2-Dichloro-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl]acetamide; Ak-Chlor; Amphicol; Anacetin; Aquamycetin; Chemicetina; Chloramex; Chlorasol; Chloric; Chlorodic; Chloromycetin; Chloroptic; Cloramfen; Chlorocyn; Enicol; Farmicetina; Fenicol; Globenicol; Intramycetin; Kemicetin; Leukomycin; Micoclorina; Mychel; Mycinol; Novomycetin; Ophthochlor; Pantovernil; Paraxin; Quemicetina; Ronphenil; Sintomycetin; Sino Phenicol; Synthomycetin; Tevcozin; Tifomycine; Veticol; Vicetin

Authority: INN

Note(s): CAS 56-75-7

NPU12938
Csf—Chloramphenicol; subst.c. = ? µmol/l

Plasma—
Chloramphenicol;—
substance concentration
micromole/litre

M = 323.14 g/mol

Other term(s): 2,2-Dichloro-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl]acetamide; Ak-Chlor; Amphicol; Anacetin; Aquamycetin; Chemicetina; Chloramex; Chlorasol; Chloric; Chlorodic; Chloromycetin; Chloroptic; Cloramfen; Chlorocyn; Enicol; Farmicetina; Fenicol; Globenicol; Intramycetin; Kemicetin; Leukomycin; Micoclorina; Mychel; Mycinol; Novomycetin; Ophthochlor; Pantovernil; Paraxin; Quemicetina; Ronphenil; Sintomycetin; Sino Phenicol; Synthomycetin; Tevcozin; Tifomycine; Veticol; Vicetin

Authority: INN

Note(s): CAS 56-75-7

NPU12934
P—Chloramphenicol; subst.c. = ? µmol/l
Chloramphenicol;
substance concentration
micromole/litre
$M = 323.14 \text{ g/mol}$
Other term(s):
2,2-Dichloro-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenoxy)]ethylacetamidine; Ak-Chlor; Amphicol; Anacetin; Aquamycin; Chemeticina; Chlorame; Chlorasol; Chloricol; Chlorocid; Chloromycetin; Chloroptic; Cloramfen; Chlorocyn; Enicol; Farmeticina; Fenicol; Globenicol; Intramycin; Kemicetine; Leukomycin; Micoclorina; Mycel; Mycinol; Novomycin; Octochlor; Pantovernil; Paraxin; Quemicetina; Ronphenil; Sintomicetina; Sno Phenicol; Synthomycin; Tevcoce; Tifomycine; Veticol; Vicet
Authority: INN
Note(s): CAS 56-75-7
NPU17513
Syst(spec.)—Chloramphenicol; subst.c. = ? µmol/l

Urine—
Chloramphenicol;
substance concentration
micromole/litre
$M = 323.14 \text{ g/mol}$
Other term(s):
2,2-Dichloro-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenoxy)]ethylacetamidine; Ak-Chlor; Amphicol; Anacetin; Aquamycin; Chemeticina; Chlorame; Chlorasol; Chloricol; Chlorocid; Chloromycetin; Chloroptic; Cloramfen; Chlorocyn; Enicol; Farmeticina; Fenicol; Globenicol; Intramycin; Kemicetine; Leukomycin; Micoclorina; Mycel; Mycinol; Novomycin; Ophthochlor; Pantovernil; Paraxin; Quemicetina; Ronphenil; Sintomicetina; Sno Phenicol; Synthomycin; Tevcoce; Tifomycine; Veticol; Vicet
Authority: INN
Note(s): CAS 56-75-7
NPU17513
U—Chloramphenicol; subst.c. = ? µmol/l

Water(drinking)—
Chloramphenicol;
substance concentration
nanomole/litre
$M = 323.14 \text{ g/mol}$
Other term(s):
2,2-Dichloro-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenoxy)]ethylacetamidine; Ak-Chlor; Amphicol; Anacetin; Aquamycin; Chemeticina; Chlorame; Chlorasol; Chloricol; Chlorocid; Chloromycetin; Chloroptic; Cloramfen; Chlorocyn; Enicol; Farmeticina; Fenicol; Globenicol; Intramycin; Kemicetine; Leukomycin; Micoclorina; Mycel; Mycinol; Novomycin; Ophthochlor; Pantovernil; Paraxin; Quemicetina; Ronphenil; Sintomicetina; Sno Phenicol; Synthomycin; Tevcoce; Tifomycine; Veticol; Vicet
Authority: INN
Note(s): CAS 56-75-7
NPU17513
U—Chloramphenicol; subst.c. = ? µmol/l

Air(ambient)—
Chlordecone;
substance concentration
nanomole/cubic metre
$M = 490.84 \text{ g/mol}$
Other term(s):
Perchloropentacyclo[5.3.0.0^2,6.0^3,9.0^2,8]dec-5-one; GC-1189; Kepone
Authority: ISO
Note(s): CAS 143-50-0
NPU16567
Air(amb)—Chlordecone; subst.c. = ? nmol/m³

Water(drinking)—
Chlordecone;
substance concentration
nanomole/litre
$M = 490.84 \text{ g/mol}$
Other term(s):
Perchloropentacyclo[5.3.0.0^2,6.0^3,9.0^2,8]dec-5-one; GC-1189; Kepone
Authority: ISO
Note(s): CAS 143-50-0
NPU16568
Water(drinking)—Chlordecone; subst.c. = ? nmol/l

Air(ambient)—
Chlordimeform;
substance concentration
nanomole/cubic metre
$M = 196.67 \text{ g/mol}$
Other term(s):
N^2-(4-chloro-2-methylphenyl)-N^1,N^1-dimethylformamidine; N^2-(4-chloro-o-tolyl)-N^1,N^1-dimethylformamidine; CDM; Chlorophenamide; Chlorphenamidine; Ciba 8514; Fundal; Galecron; Schering 36268; Spanon
Authority: ISO
Note(s): CAS 6164-98-3
NPU16569
Air(amb)—Chlordimeform; subst.c. = ? nmol/m³

Water(drinking)—
Chlordimeform;
substance concentration
nanomole/litre
$M = 196.67 \text{ g/mol}$
Other term(s):
N^2-(4-chloro-2-methylphenyl)-N^1,N^1-dimethylformamidine; N^2-(4-chloro-o-tolyl)-N^1,N^1-dimethylformamidine; CDM; Chlorophenamide; Chlorphenamidine; Ciba 8514; Fundal; Galecron; Schering 36268; Spanon
Authority: ISO
Note(s): CAS 6164-98-3
NPU165670
Water(drinking)—Chlordimeform; subst.c. = ? nmol/l

Urine—
Chlorinated hydrocarbons;
arbitrary concentration(0 1; procedure)
Other term(s): Fujiwara reactive compounds

Note(s): Examples of chlorinated hydrocarbons are Chloroform; Chloral hydrate

NPU16571
U—Chlorinated hydrocarbons; arb.c.(0 1; proc.) = ?

Water(drinking)—
Chlorinated paraffins(C_{12}H_{20}Cl_{16}(typically));
substance concentration
micromole/litre
M(typically) = 377 g/mol
Note(s): CAS 108171-26-2
NPU16572
Water(drinking)—Chlorinated paraffins(C_{12}H_{20}Cl_{16}(typically)); subst.c. = ? nmol/l

Water(drinking)—
Chlorinated paraffins(C_{23}H_{40}Cl_{18}(typically));
substance concentration
micromole/litre
M(typically) = 600 g/mol
Note(s): CAS 108171-27-3
NPU16573
Water(drinking)—Chlorinated paraffins(C_{23}H_{40}Cl_{18}(typically)); subst.c. = ? nmol/l

Air(ambient)—
Chlorine gas(Cl_{2});
substance concentration
micromole/cubic metre
M = 70.91 g/mol
Note(s): CAS 7782-50-5
NPU16574
Air(amb)—Chlorine; subst.c. = ? µmol/m³

Water(drinking)—
Chlorine(Cl_{2});
substance concentration
micromole/litre
M = 70.91 g/mol
Note(s): CAS 7782-50-5
NPU16575
Water(drinking)—Chlorine; subst.c. = ? µmol/l

Air(ambient)—
Chlorobenzene(except hexachlorobenzene);
substance concentration
micromole/litre
M(monochlorobenzene) = 112.56 g/mol
Authority: ISO
Note(s): CAS 108-90-7; Molar mass for a typical monochlorobenzene
NPU16576
Air(amb)—Chlorobenzene(except hexachlorobenzene); subst.c. = ? µmol/l

Water(drinking)—
Chlorobenzene(except hexachlorobenzene);
substance concentration
micromole/litre
M(1-chloro-2-hydroxybenzene) = 128.56 g/mol
Other term(s): 1-Chloro-2-hydroxybenzene; α-Chlorophenol; Chlorphenolate;
2-Hydroxychlorobenzene
Note(s): CAS 95-57-8
NPU16577
Water(drinking)—Chlorobenzene(except hexachlorobenzene); subst.c. = ? µmol/l

Air(ambient)—
Chloroform;
substance concentration
millimole/cubic metre
M = 119.39 g/mol
Other term(s): Methane trichloride; Trichloromethane
Note(s): CAS 67-66-3
NPU16578
Air(amb)—Chloroform; subst.c. = ? mmol/m³

Water(drinking)—
Chloroform;
substance concentration
micromole/litre
M = 119.39 g/mol
Note(s): CAS 67-66-3
NPU16579
Water(drinking)—Chloroform; subst.c. = ? µmol/l

Air(ambient)—
Chloroform;
substance concentration
micromole/litre
M = 119.39 g/mol
Note(s): CAS 67-66-3
NPU16580
Air(amb)—Chloroform; subst.c. = ? µmol/l

Water(drinking)—
2-Chlorophenol;
substance concentration
millimole/cubic metre
M = 128.56 g/mol
Other term(s): 1-Chloro-2-hydroxybenzene; α-Chlorophenol; Chlorphenolate;
2-Hydroxychlorobenzene
Note(s): CAS 95-57-8
NPU16581
Water(drinking)—2-Chlorophenol; subst.c. = ? mmol/l

Water(drinking)—
2-Chlorophenol;
substance concentration
micromole/litre
M = 128.56 g/mol
Note(s): CAS 95-57-8
NPU16582
Water(drinking)—2-Chlorophenol; subst.c. = ? µmol/l

Air(ambient)—
3-Chloroaniline;
substance concentration
micromole/litre
M(3-chloroaniline) = 105.51 g/mol
Other term(s): 3-Chloroaniline; 3-Aminochlorobenzene
Note(s): CAS 102-66-5
NPU16583
Air(amb)—3-Chloroaniline; subst.c. = ? µmol/l
Chlorophenol;
substance concentration
millimole/cubic metre
$M = 128.56 \text{ g/mol}$
Other term(s): 3-Chlorohydroxybenzene;
$m$-Chlorophenol; 3-Hydroxychlorobenzene;
Meta-chlorophenol
Note(s): CAS 108-43-0
NPU16582
Air(amb)—3-Chlorophenol; subst.c. = ? mmol/m$^3$

Water(drinking)—
3-
Chlorophenol;
substance concentration
nanomole/litre
$M = 128.56 \text{ g/mol}$
Other term(s): 3-Chlorohydroxybenzene;
$m$-Chlorophenol; 3-Hydroxychlorobenzene;
Meta-chlorophenol
Note(s): CAS 108-43-0
NPU16583
Water(drinking)—3-Chlorophenol; subst.c. = ? nmol/l

Air(ambient)—
4-
Chlorophenol;
substance concentration
millimole/cubic metre
$M = 128.56 \text{ g/mol}$
Other term(s): Applied 3-78; $p$-Chlorophenolic acid;
$p$-Chlorophenol; $p$-Hydroxychlorobenzene;
4-Hydroxychlorobenzene
Note(s): CAS 106-48-9
NPU16584
Air(amb)—4-Chlorophenol; subst.c. = ? mmol/m$^3$

Water(drinking)—
4-
Chlorophenol;
substance concentration
nanomole/litre
$M = 128.56 \text{ g/mol}$
Other term(s): Applied 3-78; $p$-Chlorophenolic acid;
$p$-Chlorophenol; $p$-Hydroxychlorobenzene;
4-Hydroxychlorobenzene
Note(s): CAS 106-48-9
NPU16585
Water(drinking)—4-Chlorophenol; subst.c. = ? nmol/l

Air(specification)—
Chromium(III and VI);
substance concentration
micromole/cubic metre
$A = 51.99 \text{ g/mol}$
Note(s): CAS 7440-47-3 (element); Atomic mass for elemental chromium
NPU16590
Air(spec.)—Chromium(III and VI); subst.c. = ? µmol/m$^3$

Cells(blood)—
Chromium(III);
substance content
nanomole/kilogram
$A = 51.99 \text{ g/mol}$
Note(s): CAS 7440-47-3 (element); Atomic mass for elemental chromium
NPU01586
Cells(b)—Chromium(III); subst.cont. = ? nmol/kg

Chlorothalonil;
substance concentration
nanomole/litre
$M = 265.91 \text{ g/mol}$
Other term(s): Tetrachloroisophthalonitrile;
Bravo; Chlorthalonil; DAC-2787; Daconil 2787;
1,3-Dicyano-2,4,5,6-tetrachlorobenzene;
Exotherm Termil; Forturf; Termil;
2,4,5,6-Tetrachloro-1,3-dicyanobenzene;
m-Tetrachlorophthalodinitrile
Authority: ISO
Note(s): CAS 1897-45-6
NPU16586
Water(drinking)—Chlorothalonil; subst.c. = ? nmol/l

Air(ambient)—
Chromate ion;
substance concentration
nanomole/cubic metre
$M = 115.99 \text{ g/mol}$
Note(s): CAS 1333-82-0 (chromic acid)
NPU16587
Air(amb)—Chromate ion; subst.c. = ? nmol/m$^3$

Water(drinking)—

Chromate ion;
substance concentration
micromole/cubic metre
$A = 51.99 \text{ g/mol}$
Note(s): CAS 1333-82-0 (chromic acid)
NPU16588
Water(drinking)—Chromate ion; subst.c. = ? µmol/m$^3$

Air(ambient)—
Chromium(VI);
substance concentration
micromole/cubic metre
$A = 51.99 \text{ g/mol}$
Note(s): CAS 7440-47-3 (element); Atomic mass for elemental chromium
NPU16590
Air(spec.)—Chromium(VI); subst.c. = ? µmol/m$^3$

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Plasma—
Chromium(III);
substance concentration
nanomole/litre
$A = 51.99 \text{ g/mol}$
Note(s): CAS 7440-47-3 (element); Atomic mass for elemental chromium
NPU01589
P—Chromium(III); subst.c. = ? nmol/l

Urine—
Chromium(III);
substance concentration
nanomole/litre
$A = 51.99 \text{ g/mol}$
Note(s): CAS 7440-47-3 (element); Atomic mass for elemental chromium
NPU01590
U—Chromium(III); subst.c. = ? nmol/l

Urine—
Cocaine and metabolites;
arbitrary concentration (0; procedure)
Authority: INN
CAS Registry Number: 50-36-2 (cocaine)
Note(s): Examples of metabolites are Benzoyl eegonine; Eegonine; Eegonine methylester
NPU08955
U—Cocaine and metabolites; arb.c.(0 1; proc.) =

Blood—
Cotinine;
substance concentration
micromole/litre
$M = 176.22 \text{ g/mol}$
Other term(s): 1-Methyl-5-pyridin-3-ylpyrrolidin-
2-one
Authority: INN
Note(s): CAS 486-56-6
NPU16593
B—Cotinine; subst.c. = ? µmol/l

Urine—
Cotinine;
substance concentration
micromole/litre
$M = 176.22 \text{ g/mol}$
Other term(s): 1-Methyl-5-pyridin-3-ylpyrrolidin-
2-one
Authority: INN
Note(s): CAS 486-56-6
NPU16594
U—Cotinine; subst.c. = ? µmol/l

Air(ambient)—
Copper((0, I and II) dust and mist);
substance concentration
micromole/cubic metre
$A = 63.55 \text{ g/mol}$
Other term(s): Copper(total)
Note(s): CAS 7440-50-8 (element); Atomic mass for elemental copper
NPU16591
Air(amb)—Copper((0, I and II) dust and mist); subst.c. = ? µmol/m³

Air(specification)—
Copper oxide(dust and fume);
substance concentration
micromole/cubic metre
$A = 79.54 \text{ g/mol}$
Note(s): CAS 1317-38-0; Atomic mass for elemental copper
NPU16592
Air(spec)—Copper oxide(dust and fume); subst.c. = ? µmol/m³

Blood—
Cotinine;
substance concentration
micromole/litre
$M = 176.22 \text{ g/mol}$
Other term(s): 1-Methyl-5-pyridin-3-ylpyrrolidin-
2-one
Authority: INN
Note(s): CAS 486-56-6
NPU16593
B—Cotinine; subst.c. = ? µmol/l

Urine—
Cotinine;
substance concentration
micromole/litre
$M = 176.22 \text{ g/mol}$
Other term(s): 1-Methyl-5-pyridin-3-ylpyrrolidin-
2-one
Authority: INN
Note(s): CAS 486-56-6
NPU16594
U—Cotinine; subst.c. = ? µmol/l

Air(ambient)—
$\alpha$-Cresol;
substance concentration
micromole/cubic metre
$M = 108.15 \text{ g/mol}$
Other term(s): 2-Methylphenol; 2-Cresol;
$\alpha$-Cresylic acid; 1-Hydroxy-2-methylbenzene;
2-Hydroxytoluene
Note(s): CAS 95-48-7
NPU16595
Air(amb)—2-Cresol; subst.c. = ? µmol/m³
Water (drinking)—

**o-Cresol**;
substance concentration
nanomole/litre
$M = 108.15$ g/mol
Other term(s): 2-Methylphenol; 2-Cresol;
o-Cresylic acid; 1-Hydroxy-2-methylbenzene;
2-Hydroxytoluene
Note(s): CAS 95-48-7
NPU16596
Water (drinking)—2-Cresol; subst. c. = ? nmol/l

Air (ambient)—

**m-Cresol**;
substance concentration
micromole/cubic metre
$M = 108.15$ g/mol
Other term(s): 3-Methylphenol; 3-Cresol;
m-Cresylic acid; 1-Hydroxy-3-methylbenzene;
3-Hydroxytoluene
Note(s): CAS 108-39-4
NPU16597
Air (amb)—3-Cresol; subst. c. = ? µmol/m$^3$

Water (drinking)—

**m-Cresol**;
substance concentration
nanomole/litre
$M = 108.15$ g/mol
Other term(s): 4-Methylphenol; 4-Cresol;
p-Cresylic acid; 1-Hydroxy-4-methylbenzene;
4-Hydroxytoluene
Note(s): CAS 106-44-5
NPU16600
Water (drinking)—4-Cresol; subst. c. = ? nmol/l

Food (specification)—

Cyanide ion;
substance content
micromole/kilogram
$M = 26.03$ g/mol
Note(s): CAS 74-90-8 (hydrogen cyanide)
NPU16601
Food (specification)—Cyanide ion; subst. cont. = ? µmol/kg

Water (drinking)—

Cyanide ion;
substance concentration
micromole/litre
$M = 26.03$ g/mol
Note(s): CAS 74-90-8 (hydrogen cyanide)
NPU16602
Water (drinking)—Cyanide ion; subst. c. = ? µmol/l

Food (specification)—

Cypermethrin;
substance content
nanomole/kilogram
$M = 416.30$ g/mol
Other term(s): (RS)-ω-Cyano-3-phenoxybenzyl
(1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-
Dimethylcyclopropane-1-carboxylate;
Agrothrin; Ammo; Arrivo; Barricade; Cymbush;
Cynoff; Cypercare; Cyperkill; Cypersect; Demon;
Dysect; Ectomin; Ecotop; Fastac; Electron;
FMC-30980; NRDC-149; Nurelle; Parasol;
Polytrin; PP-383; Ripcord; Rycopel; Sherpa;
Topclip
Authority: ISO
Note(s): CAS 52315-07-8
NPU16603
Food (specification)—Cypermethrin; subst. cont. = ? nmol/kg

Water (drinking)—

Cypermethrin;
substance concentration
nanomole/litre
$M = 416.30$ g/mol
Other term(s): (RS)-ω-Cyano-3-phenoxybenzyl
(1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-
Dimethylcyclopropane-1-carboxylate;
Agrothrin; Ammo; Arrivo; Barricade; Cymbush;
Cynoff; Cypercare; Cyperkill; Cypersect; Demon;
Dysect; Ectomin; Ecotop; Fastac; Electron;
FMC-30980; NRDC-149; Nurelle; Parasol;
Polytrin; PP-383; Ripcord; Rycopel; Sherpa;
Topclip
Food(specification)—
4,4'.

DDD:

substance content nanomole/kilogram
M = 320.05 g/mol
Other term(s): 1,1'-(2,2-Dichloroethane-1,1-diyl)bis(4-chlorobenzene); 1,1-Dichloro-2,2-bis(4-chlorophenyl)-ethane;
Dichlorodiphenyldichloroethane; Rhothane; TDE
Authority: ISO
Note(s): CAS 72-54-8

Food(specification)—4,4'-DDD; subst.cont. = ? nmol/kg

Water(drinking)—
4,4'.

DDD:

substance concentration nanomole/litre
M = 320.05 g/mol
Other term(s): 1,1'-(2,2-Dichloroethane-1,1-diyl)bis(4-chlorobenzene); 1,1-Dichloro-2,2-bis(4-chlorophenyl)-ethane;
Dichlorodiphenyldichloroethane; Rhothane; TDE
Authority: ISO
Note(s): CAS 72-54-8

Food(specification)—4,4'-DDD; subst.c. = ? nmol/l

Water(drinking)—

DDE;

substance content nanomole/kilogram
M = 318.03 g/mol
Other term(s): 1-Chloro-4-[2,2-dichloro-1-(4-chlorophenyl)ethenyl]benzene; 1-Chloro-4-[2,2-dichloro-1-(4-chlorophenyl)vinyl]benzene; Dichlorodiphenyldichloroethylene
Authority: ISO
Note(s): CAS 72-55-9

Food(specification)—DDE; subst.cont. = ? nmol/kg

Water(drinking)—

DDE;

substance concentration nanomole/litre
M = 318.03 g/mol
Other term(s): 1-Chloro-4-[2,2-dichloro-1-(4-chlorophenyl)ethenyl]benzene; 1-Chloro-4-[2,2-dichloro-1-(4-chlorophenyl)vinyl]benzene; Dichlorodiphenyldichloroethylene
Authority: ISO
Note(s): CAS 72-55-9

Food(specification)—DDE; subst.c. = ? nmol/l

Water(drinking)—

DDT(all isomers);

substance concentration micromole/cubic metre
M = 354.49 g/mol
Other term(s): 1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane; Agritan;
Chlorophenothane; Clofenotane; p,p'-DDT; Dichlorodiphenytrichloroethane; Dicophane;
Gesapon; Gesarex; Gesarol; Guesapon; Neocid; Pentachlorin
Authority: ISO
Note(s): CAS 50-29-3

Food(specification)—DDT(all isomers); subst.c. = ? µmol/m^3

Water(drinking)—

DDT(all isomers);

substance concentration nanomole/kg
M = 354.49 g/mol
Other term(s): 1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane; Agritan;
Chlorophenothane; Clofenotane; p,p'-DDT; Dichlorodiphenytrichloroethane; Dicophane;
Gesapon; Gesarex; Gesarol; Guesapon; Neocid; Pentachlorin
Authority: ISO
Note(s): CAS 50-29-3

Food(specification)—DDT(all isomers); subst.cont. = ? nmol/kg

Water(drinking)—

DDT(all isomers);

substance concentration nanomole/litre
M = 354.49 g/mol
Other term(s): 1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane; Agritan;
Chlorophenothane; Clofenotane; p,p'-DDT; Dichlorodiphenytrichloroethane; Dicophane;
Gesapon; Gesarex; Gesarol; Guesapon; Neocid; Pentachlorin
Authority: ISO
Note(s): CAS 50-29-3

Water(drinking)—

Demeton-S-methyl;

substance concentration
nanomole/litre
$M = 258.34 \text{ g/mol}$
Other term(s): S-2-(Ethylsulfanyl)ethyl $O,O$-dimethyl phosphorothioate; S-2-Ethylthioethyl $O,O$-dimethyl phosphorothioate; Bayer 8169; Mercaptophos; E-1059; Systox
Authority: ISO
Note(s): CAS 8065-48-3
NPU16615
Water(drinking)—Demeton-S-methyl; subst.c. = ? nmol/l

Food(specification)
2,5-
Diaminotoluene;
substance content
nanomole/kilogram
$M = 122.19 \text{ g/mol}$
Other term(s): 2-Methylbenzene-1,4-diamine
Note(s): CAS 95-70-5
NPU16618
Food(specification)—2,5-Diaminotoluene; subst.cont. = ? nmol/kg

Water(drinking)—
2,5-
Diaminotoluene;
substance concentration
nanomole/litre
$M = 122.19 \text{ g/mol}$
Other term(s): 2-Methylbenzene-1,4-diamine
Note(s): CAS 95-70-5
NPU16619
Water(drinking)—2,5-Diaminotoluene; subst.c. = ? nmol/l

Air(ambient)—
Diazinon;
substance concentration
micromole/cubic metre
$M = 304.36 \text{ g/mol}$
Other term(s): O,O-diethyl O-2-isopropyl-6-methylpyrimidin-4-yl phosphorothioate; Basudin; Diazide; O,O-Diethyl O-[6-methyl-2-(1-methylethyl)-4-pyrimidinyl] phosphorothioate; Spectracide
Authority: ISO
Note(s): CAS 333-41-5
NPU16620
Air(amb)—Diazinon; subst.c. = ? µmol/m$^3$

Water(drinking)—
Diazinon;
substance concentration
nanomole/litre
$M = 304.36 \text{ g/mol}$
Other term(s): O,O-diethyl O-2-isopropyl-6-methylpyrimidin-4-yl phosphorothioate; Basudin; Diazide; O,O-Diethyl O-[6-methyl-2-(1-methylethyl)-4-pyrimidinyl] phosphorothioate; Spectracide
Authority: ISO
Note(s): CAS 333-41-5
NPU16621
Water(drinking)—Diazinon; subst.c. = ? nmol/l

Air(ambient)—
Dibromoethylene;
substance concentration
nanomole/cubic metre
$M = 187.88 \text{ g/mol}$
Other term(s): Ethylene dibromide
Note(s): CAS 106-93-4
NPU16622
Air(amb)—1,2-Dibromoethylene; subst.c. = ? nmol/m$^3$

Water(drinking)—
1,2-
Dibromoethylene;
substance concentration
nanomole/litre
$M = 187.88 \text{ g/mol}$
Other term(s): Ethylene dibromide
Note(s): CAS 106-93-4
NPU16623
Water(drinking)—1,2-Dibromoethylene; subst.c. = ? nmol/l

Air(ambient)—
Dibutyl phthalate;
substance concentration
micromole/cubic metre
$M = 278.34 \text{ g/mol}$
Other term(s): Dibutyl benzene-1,2-carboxylate; DBP; Dibutyl 1,2-benzene-dicarboxylate; Di-n-butyl phthalate
Note(s): CAS 84-74-2
NPU16624
Air(amb)—Dibutyl phthalate; subst.c. = ? µmol/m$^3$

Food(specification)—
Dibutyl phthalate;
substance concentration
nanomole/kilogram
$M = 278.34 \text{ g/mol}$
Other term(s): Dibutyl benzene-1,2-carboxylate; DBP; Dibutyl 1,2-benzene-dicarboxylate; Di-n-butyl phthalate
Note(s): CAS 84-74-2
NPU16625
Food(specification)—Dibutyl phthalate; subst.cont. = ? nmol/kg

Water(drinking)—
Dibutyl phthalate;
substance concentration
nanomole/litre
M = 278.34 g/mol
Other term(s): Dibutyl benzene-1,2-carboxylate; DBP; Dibutyl 1,2-benzene-dicarboxylate; Di-n-butyl phthalate
Note(s): CAS 84-74-2

NPU16626
Water(drinking)—Dibutyl phthalate; subst.c. = ? nmol/l

Air(ambient)—
1,1-Dichloroethane;
substance concentration
millimole/cubic metre
M = 98.96 g/mol
Other term(s): Asymmetrical dichloroethane; Ethylene dichloride; Ethyldiene chloride; 1,1-Ethyldiene dichloride
Note(s): CAS 75-34-3

NPU16627
Air(amb)—1,1-Dichloroethane; subst.c. = ? mmol/m³

Water(drinking)—
1,1-Dichloroethane;
substance concentration
nanomole/litre
M = 98.96 g/mol
Other term(s): Asymmetrical dichloroethane; Ethylene dichloride; Ethyldiene chloride; 1,1-Ethyldiene dichloride
Note(s): CAS 75-34-3

NPU16628
Water(drinking)—1,1-Dichloroethane; subst.c. = ? nmol/l

Air(ambient)—
2,4-Dichlorophenoxyacetate;
substance concentration
micromole/cubic metre
M = 220.04 g/mol
Other term(s): Agrotect; Amidox; Amoxone; Aqua-kleen; Asgrow Aqua KD; Chloroxone; Crop rider; 2,4-D; 2,4-D acid; Decamine; Dichlorophenoxyacetic acid; Dichlorophenoxyethanoic acid; 2,4-Dichlorophenoxyethanoic acid; Dicopur; Dicotox; DMA-4; Dormone; Ed-weed; Emulsamine BK; Envert DT; Ferminine; Formula 40; Lawn-keep; Miracle; Monosan; Netagrone; 2,4-PA; Pannamine; Verton; Weedtox; Weedtrol
Authority: ISO
Note(s): CAS 94-75-7 (2,4-Dichlorophenoxyacetic acid)

NPU16606
Food(specification)—2,4-Dichlorophenoxyacetate; subst.cont. = ? nmol/kg

Water(drinking)—
2,4-Dichlorophenoxyacetate;
substance concentration
nanomole/litre
M = 220.04 g/mol
Other term(s): Agrotect; Amidox; Amoxone; Aqua-kleen; Asgrow Aqua KD; Chloroxone; Crop rider; 2,4-D; 2,4-D acid; Decamine; Dichlorophenoxyacetic acid; Dichlorophenoxyethanoic acid; 2,4-Dichlorophenoxyethanoic acid; Dicopur; Dicotox; DMA-4; Dormone; Ed-weed; Emulsamine BK; Envert DT; Ferminine; Formula 40; Lawn-keep; Miracle; Monosan; Netagrone; 2,4-PA; Pannamine; Verton; Weedtox; Weedtrol
Authority: ISO
Note(s): CAS 94-75-7 (2,4-Dichlorophenoxyacetic acid)

NPU16607
Water(drinking)—2,4-Dichlorophenoxyacetate; subst.c. = ? nmol/l

Air(ambient)—
1,2-Dichloropropane;
substance concentration
micromole/cubic metre
M = 112.99 g/mol
Other term(s): Propylene dichloride
Note(s): CAS 78-87-5

NPU16629
Air(amb)—1,2-Dichloropropane; subst.c. = ? µmol/m³

Water(drinking)—
1,2-Dichloropropane;
substance concentration
nanomole/litre
M = 112.99 g/mol
Other term(s): Propylene dichloride
Note(s): CAS 78-87-5

NPU16630
Water(drinking)—1,2-Dichloropropane; subst.c. = ? nmol/l
Dichloropropane;
substance concentration
nanomole/litre
\( M = 112.99 \text{ g/mol} \)
Other term(s): Propylene dichloride
Note(s): CAS 78-87-5
NPU16630
Water(drinking)—1,2-Dichloropropane; subst.c. = ? nmol/l

Air(ambient)—
1,3-
Dichloropropene;
substance concentration
micromole/cubic metre
\( M = 110.98 \text{ g/mol} \)
Other term(s): 3-Chloroallyl chloride; DCP;
1,3-Dichloro-1-propene; 1,3-Dichloropropylene;
Telone
Note(s): CAS 542-75-6
NPU16631
Air(amb)—1,3-Dichloroprop-1-ene; subst.c. = ? \(\mu\text{mol/m}^3\)

Water(drinking)—
1,3-
Dichloropropene;
substance concentration
nanomole/litre
\( M = 110.98 \text{ g/mol} \)
Other term(s): 3-Chloroallyl chloride; DCP;
1,3-Dichloro-1-propene; 1,3-Dichloropropylene;
Telone
Note(s): CAS 542-75-6
NPU16632
Water(drinking)—1,3-Dichloroprop-1-ene; subst.c. = ? nmol/l

Air(ambient)—
2,2-
Dichlorovos;
substance concentration
micromole/cubic metre
\( M = 220.98 \text{ g/mol} \)
Other term(s): 2,2-Dichlorovinyl dimethyl phosphate; DDVP; 2,2-Dichloroethenyl dimethyl phosphate
Authority: ISO
Note(s): CAS 62-73-7
NPU16635
Food(specification)—Dichlorvos; subst.cont. = ? nmol/kg

Water(drinking)—
2,2-
Dichlorovos;
substance concentration
nanomole/litre
\( M = 220.98 \text{ g/mol} \)
Other term(s): 2,2-Dichlorovinyl dimethyl phosphate; DDVP; 2,2-Dichloroethenyl dimethyl phosphate
Authority: ISO
Note(s): CAS 62-73-7
NPU16634
Water(drinking)—Dichlorvos; subst.c. = ? nmol/l

Air(ambient)—
Dieldrin;
substance concentration
micromole/cubic metre
\( M = 380.93 \text{ g/mol} \)
Other term(s): (1R,4S,4aS,5R,6R,7S,8S,8aR)-1,2,3,4,10,10-hexachloro-1,4,4a,5,6,7,8,8a-octahydro-6,7-epoxy-1,4,5,8-
dimethanonaphthalene; HEOD;
1,2,3,4,10,10-Hexachloro-6,7-epoxy-
1,4,4a,5,6,7,8,8a-octahydro-1,4-endo,exo-5,8-
dimethanonaphthalene
Authority: ISO
Note(s): CAS 60-57-1
NPU16636
Food(specification)—Dieldrin; subst.cont. = ? nmol/kg

Water(drinking)—
Dieldrin;
substance concentration
nanomole/kilogram
\( M = 380.93 \text{ g/mol} \)
Other term(s): (1R,4S,4aS,5R,6R,7S,8S,8aR)-1,2,3,4,10,10-hexachloro-1,4,4a,5,6,7,8,8a-octahydro-6,7-epoxy-1,4,5,8-
dimethanonaphthalene; HEOD;
1,2,3,4,10,10-Hexachloro-6,7-epoxy-
1,4,4a,5,6,7,8,8a-octahydro-1,4-endo,exo-5,8-
dimethanonaphthalene
Authority: ISO
Note(s): CAS 60-57-1
NPU16637
Water(drinking)—Dieldrin; subst.c. = ? nmol/l
Plasma—
Diethylene glycol;
substance concentration
millimole/litre
\(M = 106.12 \text{ g/mol}\)
Other term(s): \(2,2\text{-Oxydiethanol}\)
Note(s): CAS 111-46-6
NPU16638
P-Diethylene glycol; subst.c. = \(? \text{ mmol/l}\)

Air(ambient)—
Diethylhexyl phthalate;
substance concentration
micromole/cubic metre
\(M = 388.55 \text{ g/mol}\)
Other term(s): Bis(2-ethylhexyl) benzene-1,2-
dicarboxylate; 1,2-Benzenedicarboxylic acid
bis(2-ethylhexyl) ester; Bis(2-ethylhexyl)
phthalate; DEHP; Di(2-ethylhexyl) phthalate;
Dioctyl phthalate; Octoil
Note(s): CAS 117-81-7 (Diethylhexyl phthalic acid)
NPU16639
Air(amb)—Diethylhexyl phthalate; subst.c. = \(? \mu\text{mol/m}^3\)

Food(specification)—
Diethylhexyl phthalate;
substance content
micromole/kilogram
\(M = 388.55 \text{ g/mol}\)
Other term(s): Bis(2-ethylhexyl) benzene-1,2-
dicarboxylate; 1,2-Benzenedicarboxylic acid
bis(2-ethylhexyl) ester; Bis(2-ethylhexyl)
phthalate; DEHP; Di(2-ethylhexyl) phthalate;
Dioctyl phthalate; Octoil
Note(s): CAS 117-81-7 (Diethylhexyl phthalic acid)
NPU16640
Food(specification)—Diethylhexyl phthalate;
subst.cont. = \(? \mu\text{mol/kg}\)

Water(drinking)—
Diethylhexyl phthalate;
substance concentration
nanomole/litre
\(M = 388.55 \text{ g/mol}\)
Other term(s): Bis(2-ethylhexyl) benzene-1,2-
dicarboxylate; 1,2-Benzenedicarboxylic acid
bis(2-ethylhexyl) ester; Bis(2-ethylhexyl)
phthalate; DEHP; Di(2-ethylhexyl) phthalate;
Dioctyl phthalate; Octoil
Note(s): CAS 117-81-7 (Diethylhexyl phthalic acid)
NPU16641
Water(drinking)—Diethylhexyl phthalate; subst.c. = \(? \text{ nmol/l}\)

Blood—
Diethylstilboestrol;
substance concentration
micromole/litre
\(M = 268.36 \text{ g/mol}\)
Other term(s): Antigestil; Bufon; Cyren A; DES;
Diethylstilbestrol; Diethylstilbestriolium; Domestrol;
Estroben; Estrosyn; Fonatol; Graflexol; Makarol;
Mircet; Milestro; Neo-Oestranol I; NSC-3070;
Oestrogenine; Oestromen; Oestromensyl;
Oestromon; Palestrol; Serral; Sexocretin; Sibol;
Stilbestrol; Stilbetin; Stilboefral; Stilboestroform;
Stilboestrol; Stilkap; Synestrin; Synthoestrin;
Vagestrol
Authority: INN
Note(s): CAS 56-53-1
NPU16644
B—Diethylstilboestrol; subst.c. = \(? \mu\text{mol/l}\)

Food(specification)—
Dimethoate;
substance content
nanomole/kg
\(M = 229.28 \text{ g/mol}\)
Other term(s): \(O,O\text{-dimethyl S-(methylcarbamoyl) phosphorodithioate}\);
American Cyanamide 12880; Cygon; Fostion MM;
Perfekthion; Rogor; Roxion
Authority: ISO
Note(s): CAS 60-51-5
NPU16645
Food (specification)—Dimethoate; subst.cont. = \(? \text{ nmol/kg}\)
<table>
<thead>
<tr>
<th>Substance</th>
<th>Material</th>
<th>Concentration</th>
<th>Molecular Weight</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethoate</td>
<td>Water (drinking)</td>
<td>nanomole/litre</td>
<td>$M = 229.28$ g/mol</td>
<td>CAS 60-51-5</td>
</tr>
<tr>
<td>Dimethoate</td>
<td>Air (ambient)</td>
<td>nanomole/litre</td>
<td>$M = 229.28$ g/mol</td>
<td>NPU16646</td>
</tr>
<tr>
<td>Dimethylformamide</td>
<td>Water (drinking)</td>
<td>millimole/litre</td>
<td>$M = 73.09$ g/mol</td>
<td>CAS 68-12-2</td>
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<tr>
<td>Dimethylformamide</td>
<td>Air (ambient)</td>
<td>millimole/litre</td>
<td>$M = 73.09$ g/mol</td>
<td>NPU16647</td>
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<tr>
<td>Dimethylformamide</td>
<td>Water (drinking)</td>
<td>nanomole/litre</td>
<td>$M = 73.09$ g/mol</td>
<td>NPU16648</td>
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<tr>
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<td>Air (ambient)</td>
<td>nanomole/litre</td>
<td>$M = 73.09$ g/mol</td>
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<tr>
<td>Dimethylsulfate</td>
<td>Water (drinking)</td>
<td>micromole/litre</td>
<td>$M = 126.13$ g/mol</td>
<td>CAS 77-78-1</td>
</tr>
<tr>
<td>Dimethylsulfate</td>
<td>Air (ambient)</td>
<td>micromole/litre</td>
<td>$M = 126.13$ g/mol</td>
<td>NPU16654</td>
</tr>
<tr>
<td>Diquat</td>
<td>Water (drinking)</td>
<td>micromole/litre</td>
<td>$M = 344.05$ g/mol</td>
<td>NPU16655</td>
</tr>
</tbody>
</table>

Air (ambient) concentrations for Dimethoate, Dimethylformamide, and Dimethylsulfate are not specified.

**Blood**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Material</th>
<th>Concentration</th>
<th>Molecular Weight</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl sulfide</td>
<td>Water (drinking)</td>
<td>nanomole/litre</td>
<td>$M = 126.13$ g/mol</td>
<td>CAS 77-78-1</td>
</tr>
<tr>
<td>Dimethylsulfide</td>
<td>Water (drinking)</td>
<td>nanomole/litre</td>
<td>$M = 126.13$ g/mol</td>
<td>NPU16651</td>
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Air (ambient) concentrations for Dimethyl sulfide are not specified.

**Blood**

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<th>Substance</th>
<th>Material</th>
<th>Concentration</th>
<th>Molecular Weight</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl sulfoxide</td>
<td>Water (drinking)</td>
<td>nanomole/litre</td>
<td>$M = 126.13$ g/mol</td>
<td>CAS 77-78-1</td>
</tr>
<tr>
<td>Dimethylsulfone</td>
<td>Water (drinking)</td>
<td>nanomole/litre</td>
<td>$M = 126.13$ g/mol</td>
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Air (ambient) concentrations for Dimethyl sulfoxide are not specified.

**Blood**

<table>
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<tr>
<th>Substance</th>
<th>Material</th>
<th>Concentration</th>
<th>Molecular Weight</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Dimethyl sulfoxide</td>
<td>Blood</td>
<td>millimole/litre</td>
<td>$M = 78.14$ g/mol</td>
<td>NPU16652</td>
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</table>

Air (ambient) concentrations for Dimethyl sulfoxide are not specified.

**Blood**

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<tr>
<th>Substance</th>
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<th>Concentration</th>
<th>Molecular Weight</th>
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<td>Blood</td>
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Air (ambient) concentrations for Dimethyl sulfoxide are not specified.

**Blood**

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<th>Notes</th>
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Air (ambient) concentrations for Dimethyl sulfoxide are not specified.

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<th>Molecular Weight</th>
<th>Notes</th>
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<td>micromole/litre</td>
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Air (ambient) concentrations for Dimethyl sulfoxide are not specified.

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Air (ambient) concentrations for Dimethyl sulfoxide are not specified.

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<th>Concentration</th>
<th>Molecular Weight</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Dimethyl sulfoxide</td>
<td>Blood</td>
<td>micromole/litre</td>
<td>$M = 78.14$ g/mol</td>
<td>CAS 77-78-1</td>
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</tbody>
</table>

Air (ambient) concentrations for Dimethyl sulfoxide are not specified.
Other term(s): 9,10-Dihydro-8a,10a-diazoniaphenanthrene; Diquat dibromide; 1,1'-Ethylene-2,2'-bipyridylium dibromide
Authority: ISO
Note(s): CAS 85-00-7

NPU16655
Air(amb)—Diquat; subst.c. = ? µmol/m³

Water(drinking)—

Diquat;
substance concentration
nanomole/litre
M = 344.05 g/mol
Other term(s): 9,10-Dihydro-8a,10a-diazoniaphenanthrene; Diquat dibromide; 1,1'-Ethylene-2,2'-bipyridylium dibromide
Authority: ISO
Note(s): CAS 85-00-7

NPU16656
Water(drinking)—Diquat; subst.c. = ? nmol/l

Plasma—

Drugs
arbitrary concentration(0 1; procedure)
Note(s): Examples are Amfetamine; Amitriptyline; Cocaine; Morphine; Phenobarbital; Temazepam

NPU16657
P—Drugs; arb. c.(0 1; proc.) = ?

Air(ambient)—

Endosulfan;
substance concentration
micromole/cubic metre
M = 380.93 g/mol
Other term(s): (1R,4S,4aS,5S,6S,7R,8R,8aR)-1,2,3,4,10-hexachloro-1,4,4a,5,6,7,8,8a-octahydro-6,7-epoxy-1,4:5,8-dimethanonaphthalene; 1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-6,7-epoxy-1,4:5,8-dimethanonaphthalene; Hexadrin
Authority: ISO
Note(s): CAS Registry Number: 72-20-8

NPU16662
Water(drinking)—Endrin; subst.c. = ? nmol/l

Air(ambient)—

Epichlorohydrin;
substance concentration
micromole/cubic metre
M = 92.53 g/mol
Other term(s): (Chloromethyl)oxirane; 1-Chloro-2,3-epoxypropane; 2-Chloropropylene oxide; γ-Chloropropylene oxide
Note(s): CAS 106-89-8

NPU16663
Air(amb)—Epichlorohydrin; subst.c. = ? µmol/m³

Water(drinking)—

Endosulfan;
substance concentration
nanomole/litre
M = 406.95 g/mol
Other term(s): (1,4,5,6,7,7-Hexachloro-8,9,10-trinorborn-5-ene-2,3-diyl)bismethylene sulfite; Benzoepin; Endosulphan; 6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin 3-oxide; Thiodan
Authority: ISO
Note(s): CAS Registry Number: 115-29-7

NPU16659
Air(amb)—Endosulfan; subst.c. = ? µmol/m³

Water(drinking)—

Endosulfan;
substance concentration
nanomole/litre
M = 406.95 g/mol
Other term(s): (1,4,5,6,7,7-Hexachloro-8,9,10-trinorborn-5-ene-2,3-diyl)bismethylene sulfite; Benzoepin; Endosulphan; 6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin 3-oxide; Thiodan
Authority: ISO
Note(s): CAS Registry Number: 115-29-7

NPU16660
Water(drinking)—Endosulfan; subst.c. = ? nmol/l

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**Air (specification)**—
Ethanol; substance concentration
millimole/cubic metre
\(M = 46.07 \text{ g/mol}\)
Other term(s): ‘Alcohol; Ethyl alcohol; Ethyl hydrate; Ethyl hydroxide; Hydroxyethane
Note(s): CAS 64-17-5
NPU16665  
Air(spec)—Ethanol; subst.c. = ? mmol/m³

**Beverage (specification)**—
Ethanol; volume fraction
one
\(M = 46.07 \text{ g/mol}\)
Other term(s): ‘Alcohol; Ethyl alcohol; Ethyl hydrate; Ethyl hydroxide; Hydroxyethane
Note(s): CAS 64-17-5
NPU16666  
Beverage(spec)—Ethanol; vol.fr. = ?

**Blood**—
Ethanol; substance concentration
millimole/litre
\(M = 46.07 \text{ g/mol}\)
Other term(s): ‘Alcohol; Ethyl alcohol; Ethyl hydrate; Ethyl hydroxide; Hydroxyethane
Note(s): CAS 64-17-5
NPU18970  
P—Ethanol; subst.c. = ? mmol/l

**Plasma**—
Ethanol; substance concentration
millimole/litre
\(M = 46.07 \text{ g/mol}\)
Other term(s): ‘Alcohol; Ethyl alcohol; Ethyl hydrate; Ethyl hydroxide; Hydroxyethane
Note(s): CAS 64-17-5
NPU01992  
P—Ethanol; subst.c. = ? mmol/l

**Urine**—
Ethanol; substance concentration
millimole/litre
\(M = 46.07 \text{ g/mol}\)
Other term(s): ‘Alcohol; Ethyl alcohol; Ethyl hydrate; Ethyl hydroxide; Hydroxyethane
Note(s): CAS 64-17-5
NPU01993  
U—Ethanol; subst.c. = ? mmol/l

**Water (drinking)**—
Ethanol; substance concentration
nanomole/litre
\(M = 46.07 \text{ g/mol}\)
Other term(s): ‘Alcohol; Ethyl alcohol; Ethyl hydrate; Ethyl hydroxide; Hydroxyethane
Note(s): CAS 64-17-5
NPU16668  
Water(drinking)—Ethanol; subst.c. = ? nmol/l

**Air (ambient)**—
Ethoxyethanol; substance concentration
micromole/cubic metre
\(M = 90.12 \text{ g/mol}\)
Other term(s): Cellosolve; EGEE; Ethylene glycol monoethyl ether
Note(s): CAS 110-80-5
NPU16669  
Air(amb)—2-Ethoxyethanol; subst.c. = ? µmol/m³

**Air (ambient)**—
Ethylbenzene; substance concentration
millimole/cubic metre
\(M = 106.16 \text{ g/mol}\)
Other term(s): Ethylbenzol; Phenylethane
Note(s): CAS 100-41-4
NPU16670  
Air(amb)—Ethylbenzene; subst.c. = ? mmol/m³

**Water (drinking)**—
Ethylbenzene; substance concentration
nanomole/litre
\(M = 106.16 \text{ g/mol}\)
Other term(s): Ethylbenzol; Phenylethane
Note(s): CAS 100-41-4
NPU16671  
Water(drinking)—Ethylbenzene; subst.c. = ? nmol/l

**Air (ambient)**—
Ethylene glycol; substance concentration
micromole/cubic metre
\(M = 62.07 \text{ g/mol}\)
Other term(s): Ethane-1,2-diol; 1,2-Dihydroxyethane; 1,2-Ethanediol; Glycol; Glycol alcohol; Monoethylene glycol
Note(s): CAS 107-21-1
NPU16672  
Air(amb)—Ethylene glycol; subst.c. = ? µmol/m³

**Beverage (specification)**—
Ethylene glycol; substance concentration
nanomole/litre
\(M = 62.07 \text{ g/mol}\)
Other term(s): Ethane-1,2-diol; 1,2-Dihydroxyethane; 1,2-Ethanediol; Glycol; Glycol alcohol; Monoethylene glycol
Note(s): CAS 107-21-1

Properties and units in clinical and environmental human toxicology

<table>
<thead>
<tr>
<th>Substance</th>
<th>Concentration</th>
<th>Unit</th>
<th>M (g/mol)</th>
<th>Other Terms</th>
<th>Note(s)</th>
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<tr>
<td><strong>Ethylene glycol</strong></td>
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<td><strong>Plasma</strong></td>
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<td></td>
<td></td>
<td><strong>Ethylene glycol</strong>; subst. c. = ? nmol/l</td>
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</tr>
<tr>
<td><strong>Water (drinking)</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Ethylene glycol</strong>; subst. c. = ? mmol/l</td>
<td></td>
</tr>
<tr>
<td><strong>Blood</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Ethylmercury chloride (Hg)</strong></td>
<td></td>
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<td><strong>Air(ambient)</strong></td>
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<td></td>
<td><strong>Fenitrothion</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Water (drinking)</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Fenitrothion</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Urine</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Ethylglucuronide</strong>; subst. c. = ? µmol/l</td>
<td></td>
</tr>
<tr>
<td><strong>Urine</strong></td>
<td></td>
<td><strong>2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidene</strong></td>
<td>M = 277.41 g/mol</td>
<td>Other term(s): 1,5-Dimethyl-3,3-diphenyl-2-ethylidene-pyrrolidene; EDDP; Eddp-3,3; 2-Et-1,5-Dime-3,3-DPP</td>
<td>Note(s): CAS 30223-73-5; methadone metabolite</td>
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<tr>
<td><strong>Water (drinking)</strong></td>
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<td><strong>Ethylglucuronide</strong></td>
<td></td>
<td><strong>Ethylglucuronide</strong></td>
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<td><strong>2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidene</strong></td>
<td>M = 265.10 g/mol</td>
<td>Other term(s): Chloroethylmercury; Ethylmercuric chloride; Granosan</td>
<td>Note(s): CAS 107-27-7</td>
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<td><strong>Air(ambient)</strong></td>
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<td><strong>Fenitrothion</strong></td>
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<td><strong>Urine</strong></td>
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<td></td>
<td></td>
<td><strong>Ethylglucuronide</strong></td>
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<td><strong>Blood</strong></td>
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<td><strong>2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidene</strong></td>
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</tr>
<tr>
<td><strong>Urine</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Ethylglucuronide</strong></td>
<td></td>
</tr>
</tbody>
</table>

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Air(ambient)—
Fenvalerate;
  substance concentration
  micromole/cubic metre
  \( M = 419.93 \) g/mol
  Other term(s): (RS)-a-Cyano-3-phenoxybenzyl (RS)-2-(4-chlorophenyl)-3-methylbutanoate;
  Belmark; Cyano(3-phenoxyphenyl)methyl 4-chloro-a-(1-methylethyl)benzeneacetate;
  Phenvalerate; Pydrin; Pyridin; S-5602; SD-43775; Sumicidin; Tirade; WL-43775
  Authority: ISO
  Note(s): CAS Registry Number: 51630-58-1

NP16682
Air(amb)—Fenvalerate; subst.c. = \(? \) \( \mu \)mol/m\(^3\)

Water(drinking)—
Fenvalerate;
  substance concentration
  nanomole/litre
  \( M = 419.93 \) g/mol
  Other term(s): (RS)-a-Cyano-3-phenoxybenzyl (RS)-2-(4-chlorophenyl)-3-methylbutanoate;
  Belmark; Cyano(3-phenoxyphenyl)methyl 4-chloro-a-(1-methylethyl)benzeneacetate;
  Phenvalerate; Pydrin; Pyridin; S-5602; SD-43775; Sumicidin; Tirade; WL-43775
  Authority: ISO
  Note(s): CAS Registry Number: 51630-58-1

NP16683
Water(drinking)—Fenvalerate; subst.c. = \(? \) nmol/l

Plasma—
Fluoride;
  substance concentration
  micromole/litre
  \( A = 19.00 \) g/mol
  Note(s): CAS 16894-48-8; Atomic mass for elemental fluorine
  NPU04882
P—Fluoride ion; subst.c. = \(? \) \( \mu \)mol/l

Water(drinking)—
Fluoride;
  substance concentration
  micromole/litre
  \( A = 19.00 \) g/mol
  Note(s): CAS 16894-48-8; Atomic mass for elemental fluorine
  NPU16684
Water(drinking)—Fluoride ion; subst.c. = \(? \) \( \mu \)mol/l

Air(ambient)—
Fluorine(total);
  substance concentration
  micromole/cubic metre
  \( A = 19.00 \) g/mol
  Note(s): CAS 7782-41-4 (fluorine gas); Atomic mass for elemental fluorine
  NPU16685
Air(amb)—Fluorine(total); subst.c. = \(? \) \( \mu \)mol/m\(^3\)

Air(ambient)—
Fluorine(gas);
  substance concentration
  micromole/cubic metre
  \( M = 38.00 \) g/mol
  Other term(s): Diffluorine
  Note(s): CAS 7782-41-4
  NPU16686
Air(amb)—Fluorine(gas); subst.c. = \(? \) \( \mu \)mol/m\(^3\)

Air(ambient)—
Formaldehyde;
  substance concentration
  micromole/cubic metre
  \( M = 30.03 \) g/mol
  Other term(s): Methanal; Methyl anhydride; Methylene oxide
  Note(s): CAS 50-00-0
  NPU16687
Air(amb)—Formaldehyde; subst.c. = \(? \) \( \mu \)mol/m\(^3\)

Water(drinking)—
Formaldehyde;
  substance concentration
  nanomole/litre
  \( M = 30.03 \) g/mol
  Other term(s): Methanal; Methyl anhydride; Methylene oxide
  Note(s): CAS 50-00-0
  NPU16688
Water(drinking)—Formaldehyde; subst.c. = \(? \) nmol/l

Air(ambient)—
Formate;
  substance concentration
  micromole/cubic metre
  \( M(\text{formic acid}) = 45.03 \) g/mol
  Other term(s): Hydrogen carboxylate; Methanoate
  Note(s): CAS 64-18-6 (formic acid)
  NPU16689
Air(amb)—Formate; subst.c. = \(? \) \( \mu \)mol/m\(^3\)

Plasma—
Formate;
  substance concentration
  millimole/litre
  \( M(\text{formic acid}) = 45.03 \) g/mol
  Other term(s): Hydrogen carboxylate; Methanoate
  Note(s): CAS 64-18-6 (formic acid)
  NPU16690
P—Formate; subst.c. = \(? \) mmol/l

Urine—
Formate;
  substance concentration
  millimole/litre

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\[ M(\text{formic acid}) = 45.03 \text{ g/mol} \]

Other term(s): Hydrogen carboxylate; Methanoate

Note(s): CAS 64-18-6 (formic acid)

**NPU16691**

U—Formate; subst.c. = ? mmol/l

**Water(drinking)—**

Formate;

substance concentration

millimole/litre

\[ M(\text{formic acid}) = 45.03 \text{ g/mol} \]

Other term(s): Hydrogen carboxylate; Methanoate

Note(s): CAS 64-18-6 (formic acid)

**NPU16692**

Water(drinking)—Formate; subst.c. = ? mmol/l

**Plasma—**

Glycolate;

substance concentration

millimole/litre

\[ M(\text{glycolic acid}) = 75.05 \text{ g/mol} \]

Other term(s): Hydroxyacetate; Glycollate; Hydroxyethanoate;

Note(s): CAS 79-14-1 (glycolic acid)

**NPU16693**

P—Glycolate; subst.c. = ? mmol/l

**Plasma—**

Glycolaldehyde;

substance concentration

millimole/litre

\[ M = 134.17 \text{ g/mol} \]

Other term(s): Hydroxyacetaldehyde

Note(s): CAS 621-63-6

**NPU16694**

P—Glycolaldehyde; subst.c. = ? mmol/l

**Plasma—**

Glyoxylate;

substance concentration

millimole/litre

\[ M = 71.04 \text{ g/mol} \]

Other term(s): Oxocacetate; Formylformate; Glyoxalate; Oxethanoate

Note(s): CAS 298-12-4

**NPU16695**

P—Glyoxylate; subst.c. = mmol/l

**Air(ambient)—**

Glyphosate;

substance concentration

micromole/cubic metre

\[ M = 169.07 \text{ g/mol} \]

Other term(s): \(N\)-(phosphonomethyl)glycine; Glifinox; Glycel; Honcho; Jury; Roundup (41 %); Weedoff

Authority: ISO

Note(s): CAS 1071-83-6

**NPU16697**

Water(drinking)—Glyphosate; subst.c. = ? nmol/l

**Air(ambient)—**

Heptachlor;

substance concentration

micromole/cubic metre

\[ M = 373.35 \text{ g/mol} \]

Other term(s): 1H-1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene;

Heptachlore

Authority: ISO

Note(s): CAS 76-44-8

**NPU16698**

Air(amb)—Heptachlor; subst.c. = ? µmol/m³

**Water(drinking)—**

Heptachlor;

substance concentration

nanomole/litre

\[ M = 373.35 \text{ g/mol} \]

Other term(s): 1H-1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene;

Heptachlore

Authority: ISO

Note(s): CAS 76-44-8

**NPU16699**

Water(drinking)—Heptachlor; subst.c. = ? nmol/l

**Air(ambient)—**

Hexachlorobenzene;

substance concentration

micromole/cubic metre

\[ M = 284.78 \text{ g/mol} \]

Other term(s): HCB

Note(s): CAS 118-74-1

**NPU16700**

Air(amb)—Hexachlorobenzene; subst.c. = ? µmol/m³

**Water(drinking)—**

Hexachlorobenzene;

substance concentration

nanomole/litre

\[ M = 284.78 \text{ g/mol} \]

Other term(s): HCB

Note(s): CAS 118-74-1
NPU16701
Water (drinking)—Hexachlorobenzene; subst. c. = ? nmol/l

Air (ambient)—
Hexachlorobutadiene;
substance concentration
micromole/cubic metre
M = 260.76 g/mol
Other term(s): 1,1,2,3,4,4-Hexachlorobuta-1,3-diene; HCBD; Hexachloro-1,3-butadiene; 1,3-Hexachlorobutadiene; Perchlorobutadiene
Note(s): CAS 87-68-3
NPU16702
Air (amb)—Hexachlorobutadiene; subst. c. = ? µmol/m³

Water (drinking)—
Hexachlorobutadiene;
substance concentration
nanomole/litre
M = 260.76 g/mol
Other term(s): 1,1,2,3,4,4-Hexachlorobuta-1,3-diene; HCBD; Hexachloro-1,3-butadiene; 1,3-Hexachlorobutadiene; Perchlorobutadiene
Note(s): CAS 87-68-3
NPU16703
Water (drinking)—Hexachlorobutadiene; subst. c. = ? nmol/l

Air (ambient)—
Hexachlorocyclopentadiene;
substance concentration
micromole/cubic metre
M = 272.75 g/mol
Other term(s): 1,2,3,4,5,5-Hexachlorocyclopenta-1,3-diene; HCCPD; Hexachloro-1,3-cyclopentadiene; 1,2,3,4,5,5-Hexachloro-1,3-cyclopentadiene; Perchlorocyclopentadiene
Note(s): CAS 77-47-4
NPU16704
Air (amb)—Hexachlorocyclopentadiene; subst. c. = ? µmol/m³

Water (drinking)—
Hexachlorocyclopentadiene;
substance concentration
nanomole/litre
M = 272.75 g/mol
Other term(s): 1,2,3,4,5,5-Hexachlorocyclopenta-1,3-diene; HCCPD; Hexachloro-1,3-cyclopentadiene; 1,2,3,4,5,5-Hexachloro-1,3-cyclopentadiene; Perchlorocyclopentadiene
Note(s): CAS 77-47-4
NPU16705
Water (drinking)—Hexachlorocyclopentadiene; subst. c. = ? nmol/l

Air (ambient)—
Hexane;
substance concentration
millimole/cubic metre
M = 86.18 g/mol
Other term(s): Hexane; Hexyl hydride; Normal-hexane
Note(s): CAS 110-54-3
NPU16706
Air (amb)—n-Hexane; subst. c. = ? mmol/m³

Water (drinking)—
n-Hexane;
substance concentration
nanomole/litre
M = 86.18 g/mol
Other term(s): Hexane; Hexyl hydride; Normal-hexane
Note(s): CAS 110-54-3
NPU16707
Water (drinking)—n-Hexane; subst. c. = ? nmol/l

Air (ambient)—
Hydrazine;
substance concentration
micromole/cubic metre
M = 32.06 g/mol
Other term(s): Diazane; Diamine; Hydrazine base
Note(s): CAS 302-01-2
NPU16708
Air (amb)—Hydrazine; subst. c. = ? µmol/m³

Air (ambient)—
Hydrogen bromide
substance concentration
micromole/cubic metre
M = 80.92 g/mol
Note(s): CAS 10035-10-6
NPU16709
Air (amb)—Hydrogen bromide; subst. c. = ? µmol/m³

Air (ambient)—
Hydrogen chloride
substance concentration
micromole/cubic metre
M = 36.47 g/mol
Other term(s): Muriatic acid
Note(s): CAS 7647-01-0
NPU16710
Air (amb)—Hydrogen chloride; subst. c. = ? µmol/m³

Air (ambient)—
Hydrogen cyanide
substance concentration
micromole/cubic metre
M = 27.03 g/mol
Note(s):
Other term(s): Formonitrile; Hydrocyanic acid; Prussic acid
Note(s): CAS 74-90-8
NPU16711
Air(amb)—Hydrogen cyanide; subst.c. = \(? \mu\text{mol/m}^3\)

Air(ambient)—
Hydrogen fluoride;
substance concentration
micromole/cubic metre
M = 20.01 g/mol
Note(s): CAS 7664-39-3
NPU16712
Air(amb)—Hydrogen fluoride; subst.c. = \(? \mu\text{mol/m}^3\)

Water(drinking)—
Hydrogen sulfide;
substance concentration
micromole/cubic metre
M = 34.08 g/mol
Other term(s): Hydrosulfuric acid; Sewer gas; Sulfuretted hydrogen
Note(s): CAS 7783-06-4
NPU16713
Air(amb)—Hydrogen sulfide; subst.c. = \(? \mu\text{mol/m}^3\)

Water(drinking)—
Hydrogen sulfide;
substance concentration
micromole/litre
M = 34.08 g/mol
Other term(s): Hydrosulfuric acid; Sewer gas; Sulfuretted hydrogen
Note(s): CAS 7783-06-4
NPU16714
Water(drinking)—Hydrogen sulfide; subst.c. = \(? \mu\text{mol/l}\)

Air(ambient)—
Hydroquinone;
substance concentration
micromole/cubic metre
M = 110.11 g/mol
Other term(s): Benzene-1,4-diol; \(p\)-Benzenediol; 1,4-Benzenediol; Dihydroxybenzene; 1,4-Dihydroxybenzene; Quinol
Note(s): CAS 123-31-9
NPU16715
Air(amb)—Hydroquinone; subst.c. = \(? \mu\text{mol/m}^3\)

Water(drinking)—
Hydroquinone;
substance concentration
nanomole/litre
M = 110.11 g/mol
Other term(s): Benzene-1,4-diol; \(p\)-Benzenediol; 1,4-Benzenediol; Dihydroxybenzene; 1,4-Dihydroxybenzene; Quinol
Note(s): CAS 123-31-9
NPU16716
Water(drinking)—Hydroquinone; subst.c. = \(? \text{nmol/l}\)

Urine—
Iodide;
substance concentration
micromole/litre
A = 126.90 g/mol
Note(s): CAS 29461-54-5; Atomic mass for elemental iodine
NPU04884
U—Iodide ion; subst.c. \(? \mu\text{mol/l}\)

Air(ambient)—
Iodine(total);
substance concentration
micromole/cubic metre
M = 126.90 g/mol
Note(s): CAS 29553-56-2; Atomic mass for elemental iodine
NPU16717
Air(amb)—Iodine(total); subst.c. = \(? \mu\text{mol/m}^3\)

Air(ambient)—
Iodine;
substance concentration
micromole/cubic metre
M = 253.81 g/mol
Note(s): CAS 7553-56-2
NPU16718
Air(amb)—Iodine(I\(_2\)); subst.c. = \(? \mu\text{mol/m}^3\)

Plasma—
Iron(III);
substance concentration
micromole/litre
A = 55.85 g/mol
Note(s) 1: CAS 7439-89-6 (element); Atomic mass for elemental iron
NPU16917
P—Iron(III); subst.c. = \(? \mu\text{mol/l}\)

Urine—
Iron(III);
substance concentration
micromole/litre
A = 55.85 g/mol
Note(s) 1: CAS 7439-89-6 (element); Atomic mass for elemental iron
NPU16944
U—Iron(III); subst.c. = \(? \mu\text{mol/l}\)

Air(ambient)—
Iron(II and III) oxide(dust and fume);
substance concentration
micromole/cubic metre
M(Iron(III) oxide) = 159.68 g/mol

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Note(s): CAS 1309-37-1 (ferric oxide); Molar mass for ferric oxide

**NPU16719**

Air(ambient)—Iron(II and III) oxide (dust and fume); subst.c. = ? µmol/m³

**Air(ambient)—Iron pentacarbonyl**

- substance concentration
- micromole/cubic metre
- \( M = 195.90 \) g/mol

Note(s): CAS 13463-40-6

**NPU16720**

Air(ambient)—Iron pentacarbonyl; subst.c. = ? µmol/m³

**Air(ambient)—Iron(II and III) salts (soluble)**

- substance concentration (procedure)
- micromole/cubic metre
- \( A = 55.85 \) g/mol

Note(s): CAS 7439-89-6 (element); Atomic mass for elemental iron

**NPU16721**

Air(ambient)—Iron(II and III) salts (soluble); subst.c.(proc.) = ? µmol/m³

**Water(drinking)—Iron(II and III) salts (soluble)**

- substance concentration (procedure)
- micromole/litre
- \( A = 55.85 \) g/mol

Note(s): CAS 7439-89-6 (element); Atomic mass for elemental iron

**NPU16722**

Water(drinking)—Iron(II and III) salts (soluble); subst.c.(proc.). = ? µmol/l

**Water(drinking)—Isobenzan**

- substance concentration
- micromole/litre
- \( M = 411.75 \) g/mol

Other term(s): 1,3,4,5,6,7,8,8-Octachloro-1,3,3a,4,7,7a-hexahydro-4,7-methanoisobenzofuran; 1,3,4,5,6,7,8,8-Octachloro-4,7-endomethylene-4,7,8,9-tetrahydrophthalan; Omtan; R-6700; SD-4402; Telodrin

Authority: ISO

Note(s): CAS 297-78-9

**NPU16723**

Water(drinking)—Isobenzan; subst.c. = ? µmol/l

**Air(ambient)—Isophorone**

- substance concentration
- micromole/cubic metre
- \( M = 138.21 \) g/mol

Other term(s): 3,5,5-Trimethylcyclohex-2-en-1-one; Isoacetophorone; 3,5,5-Trimethyl-2-cyclohexenone

Authority: INN

Note(s): CAS 78-59-1

**NPU16724**

Air(ambient)—Isophorone; subst.c. = ? µmol/m³

**Water(drinking)—Isophorone**

- substance concentration
- micromole/litre
- \( M = 138.21 \) g/mol

Other term(s): 3,5,5-Trimethylcyclohex-2-en-1-one; Isoacetophorone; 3,5,5-Trimethyl-2-cyclohexenone

Authority: INN

Note(s): CAS 78-59-1

**NPU16725**

Water(drinking)—Isophorone; subst.c. = ? µmol/l

**Blood**

**Lead(II)**

- substance concentration
- micromole/litre
- \( A = 207.20 \) g/mol

Note(s): CAS 7439-92-1 (element); Atomic mass for elemental lead

**NPU16918**

B—Lead(II); subst.c. = ? µmol/l

**Cells(blood)**

**Lead(II)**

- substance content
- micromole/kilogram
- \( A = 207.20 \) g/mol

Note(s): CAS 7439-92-1 (element); Atomic mass for elemental lead

**NPU16919**

Cells(b)—Lead(II); subst.cont. = ? µmol/kg

**Plasma**

**Lead(II)**

- substance concentration
- micromole/litre
- \( A = 207.20 \) g/mol

Note(s): CAS 7439-92-1 (element); Atomic mass for elemental lead

**NPU16950**

P—Lead(II); subst.c. = ? µmol/l

**Urine**

**Lead(II)**

- substance concentration
- micromole/litre
- \( A = 207.20 \) g/mol

Note(s): CAS 7439-92-1 (element); Atomic mass for elemental lead
Properties and units in clinical and environmental human toxicology

U—Lead(II); subst.c. = ? µmol/l

Water(drinking)—

Lead(II);

substance concentration
nanomole/litre

$A = 207.20$ g/mol

Note(s): CAS 7439-92-1 (element); Atomic mass for elemental lead

NPU16725

Water(drinking)—Lead(II); subst.c. = ? nmol/l

Air(ambient)—

Lead(0, II and IV);

substance concentration
micromole/cubic metre

$A = 207.20$ g/mol

Note(s): CAS 7439-92-1 (element); Atomic mass for elemental lead

NPU16727

Air(amb)—Lead(0, II and IV); subst.c. = ? µmol/m$^3$

Air(ambient)—

Gamma-HCH;

substance concentration
micromole/cubic metre

$M = 290.85$ g/mol

Other term(s): 1α,2α,3β,4α,5α,6β-Hexachlorocyclohexane; BHC; HCH;

γ-Hexachlorocyclohexane; γ-isomer of 1,2,3,4,5,6-Hexachlorocyclohexane; Lindan;

Lindane

Authority: ISO

Note(s): CAS 58-89-9

NPU16728

Air(amb)—Gamma-HCH; subst.c. = ? µmol/m$^3$

Water(drinking)

Gamma-HCH;

substance concentration
nanomole/litre

$M = 290.85$ g/mol

Other term(s): 1α,2α,3β,4α,5α,6β-Hexachlorocyclohexane; BHC; HCH;

γ-Hexachlorocyclohexane; γ-isomer of 1,2,3,4,5,6-Hexachlorocyclohexane; Lindan;

Lindane

Authority: ISO

Note(s): CAS 58-89-9

NPU16729

Water(drinking)—Gamma-HCH; subst.c. = ? nmol/l

Air(ambient)—

Lithium hydride;

substance concentration
micromole/cubic metre

$M = 7.95$ g/mol

Note(s): CAS 7580-67-8

NPU16730

Air(amb)—Lithium hydride; subst.cont. = ? µmol/m$^3$

Plasma—

Lithium ion;

substance concentration
micromole/litre

$A = 6.94$ g/mol

Note(s): CAS 7459-93-2 (element); Atomic mass for elemental lithium

NPU02613

P—Lithium ion; subst.c. = ? mmol/l

Urine—

Lithium ion;

substance concentration
micromole/litre

$A = 6.94$ g/mol

Note(s): CAS 7459-93-2 (element); Atomic mass for elemental lithium

NPU04888

U—Lithium ion; subst.c. = ? µmol/l

Air(ambient)—

Magnesite;

substance concentration
micromole/cubic metre

$M = 84.31$ g/mol

Other term(s): Magnesium carbonate; Carbonic acid, magnesium salt

Note(s): CAS 546-93-0

NPU16731

Air(amb)—Magnesite; subst.c. = ? µmol/m$^3$

Plasma—

Magnesium(II) (total);

substance concentration
millimole/litre

$A = 24.31$ g/mol

Note(s): CAS 7439-95-4 (element); Atomic mass for elemental magnesium

NPU02647

P—Magnesium(II) (total); subst.c. = ? mmol/l

Urine—

Magnesium(II) (total);

substance concentration
millimole/litre

$M = 24.31$ g/mol

Note(s): CAS 7439-95-4 (element); Atomic mass for elemental magnesium

NPU02648

U—Magnesium(II) (total); subst.c. = ? mmol/l

Water(drinking)—

Magnesium(II) (total);

substance concentration
millimole/litre

$M = 24.31$ g/mol

Note(s): CAS 7439-95-4 (element); Atomic mass for elemental magnesium

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A = 24.31 g/mol
Note(s): CAS 7439-95-4 (element); Atomic mass for elemental magnesium

NPUI6732
Water(drinking)—Magnesium (II) (total); subst.c. = ? nmol/l

Air(ambient)—
Magnesium oxide (fume);
substance concentration
micromole/cubic metre
M = 40.30 g/mol
Note(s): CAS 1309-48-4

NPUI6733
Air(amb)—Magnesium oxide fume; subst.c. = ? µmol/m³

Air(ambient)—
Malathion;
substance concentration
micromole/cubic metre
M = 330.36 g/mol
Other term(s): S-1,2-bis(ethoxycarbonyl)ethyl
O,O-dimethyl phosphorodithioate; Diethyl
[(dimethoxyphosphinothioyl)thio]butanedioate
Authority: ISO
Note(s): CAS 121-75-5

NPUI6734
Air(amb)—Malathion; subst.c. = ? µmol/m³

Water(drinking)—
Malathion;
substance concentration
nanomole/litre
M = 330.36 g/mol
Other term(s): S-1,2-bis(ethoxycarbonyl)ethyl
O,O-dimethyl phosphorodithioate; Diethyl
[(dimethoxyphosphinothioyl)thio]butanedioate
Authority: ISO
Note(s): CAS 121-75-5

NPUI6735
Water(drinking)—Malathion; subst.c. = ? nmol/l

Blood—
Manganese(II);
substance concentration
nanomole/litre
A = 54.94 g/mol
Note(s): CAS 7439-96-5 (element); Atomic mass for elemental manganese

NPUI6951
Cells(b)—Manganese(II); subst.cont. = ? nmol/kg

Plasma—
Manganese(II);
substance concentration
nanomole/litre
A = 54.94 g/mol
Note(s): CAS 7439-96-5 (element); Atomic mass for elemental manganese

NPUI6922
P—Manganese(II); subst.c. = ? nmol/l

Urine—
Manganese(II);
substance concentration
nanomole/litre
A = 54.94 g/mol
Note(s): CAS 7439-96-5 (element); Atomic mass for elemental manganese

NPUI6923
U—Manganese(II); subst.c. = ? nmol/l

Air(ambient)—
Manganese((II,III,IV,V,VII) dust and fume);
substance concentration
micromole/cubic metre
A = 54.94 g/mol
Note(s): CAS 7439-96-5 (element); Atomic mass for elemental manganese

NPUI6736
Air(amb)—Manganese((II, III, IV, V, VI and VII) dust and fume); subst.c. = ? µmol/m³

Water(drinking)—
Manganese((II, III, IV, V, VI and VII);
substance concentration
micromole/litre
A = 54.94 g/mol
Note(s): CAS 7439-96-5 (element); Atomic mass for elemental manganese

NPUI6737
Water(drinking)—Manganese((II, III, IV, V, VI and VII); subst.c. = ? µmol/l

Air(ambient)—
Mercury((0, I and II) inorganic);
substance concentration
micromole/cubic metre
A = 200.59 g/mol
Note(s): CAS 7439-97-6 (element); Atomic mass for elemental mercury

NPUI6738
Air(amb)—Mercury((0, I and II) inorganic); subst.c. = ? µmol/m³

Blood—
Mercury(0 and II);
substance concentration
nanomole/litre
A = 200.59 g/mol
Note(s): CAS 7439-97-6 (element); Atomic mass for elemental mercury

**NPU16924**
B—Mercury(0 and II); subst.c. = ? nmol/l

**Cells(blood)—**
Mercury(0 and II);  
substance content  
nanomole/kilogram  
A = 200.59 g/mol  
Note(s): CAS 7439-97-6 (element); Atomic mass for elemental mercury

**NPU16952**
Cells(b)—Mercury(0 and II); subst.cont. = ? nmol/kg

**Hair—**
Mercury(0 and II);  
substance content  
gram/kilogram  
A = 200.59 g/mol  
Note(s): CAS 7439-97-6 (element); Atomic mass for elemental mercury

**NPU16739**
Hair—Mercury(0 and II); subst.cont. = ? µg/kg

**Plasma—**
Mercury(0 and II);  
substance concentration  
nanomole/litre  
A = 200.59 g/mol  
Note(s): CAS 7439-97-6 (element); Atomic mass for elemental mercury

**NPU16925**
P—Mercury(0 and II); subst.c. = ? nmol/l

**Urine—**
Mercury(II);  
substance concentration  
nanomole/litre  
A = 200.59 g/mol  
Note(s): CAS 7439-97-6 (element); Atomic mass for elemental mercury

**NPU16926**
U—Mercury(II); subst.c. = ? nmol/l

**Water(drinking)—**
Mercury(II) inorganic;  
substance concentration  
nanomole/litre  
A = 200.59 g/mol  
Note(s): CAS 7439-97-6 (element); Atomic mass for elemental mercury

**NPU16740**
Water(drinking)—Mercury(II) inorganic; subst.c. = ? nmol/l

**Air(ambient)—**
Mercury(II) bound to alkyl;  
substance concentration  
nanomole/cubic metre  
A = 200.59 g/mol  
Note(s): CAS 7439-97-6 (element); Atomic mass for elemental mercury

**NPU16741**
Air(amb)—Mercury(II) alkyl; subst.c. = ? nmol/m³

**Water(drinking)—**
Mercury(II) bound to aryl;  
substance concentration  
nanomole/cubic metre  
A = 200.59 g/mol  
Note(s): CAS 7439-97-6 (element); Atomic mass for elemental mercury

**NPU16742**
Air(amb)—Mercury(II) aryl; subst.c. = ? nmol/m³

**Urine—**
DL-Methadone;  
substance concentration  
micromole/litre  
M = 309.45 g/mol  
Other term(s): 6-(Dimethylamino)-4,4-diphenylheptan-3-one; 1,1-Diphenyl-1-(2-dimethylaminopropyl)-2-butanone  
Authority: INN

**NPU16745**
P—DL-Methadone; subst.c. = ? µmol/l

**Urine—**
DL-Methadone;  
arbitrary concentration(0 1; procedure)  
M = 309.45 g/mol

Other term(s): 6-(Dimethylamino)-4,4-diphenylheptan-3-one; 1,1-Diphenyl-1-(2-dimethylaminopropyl)-2-butanone
Authority: INN
Note(s): CAS 76-99-3
NPU16746

U—O-Methadone; arb.c.(0 1; proc.) =

Haemoglobin(total, Blood)—
Methaemoglobin;
substance fraction one
$M = \text{about } 64\ 500\ \text{g/mol (tetramer)}$
Other term(s): Ferrihaemoglobin; Haemiglobin; Met Hb
Note(s): CAS 9008-37-1
NPU02725

Hb—Methaemoglobin; subst.fr. = ?

Air(ambient)—
Methanol;
substance concentration millimole/cubic metre
$M = 32.04\ \text{g/mol}$
Other term(s): Carbinol; Columbian spirits; Methyl alcohol; Pyroligneous spirit; Wood alcohol; Wood naphtha; Wood spirit
Note(s): CAS 67-56-1
NPU16748

Air(amb)—Methanol; subst.c. = ? mmol/m$^3$

Blood—
Methanol;
substance concentration millimole/litre
$M = 32.04\ \text{g/mol}$
Other term(s): Carbinol; Columbian spirits; Methyl alcohol; Pyroligneous spirit; Wood alcohol; Wood naphtha; Wood spirit
Note(s): CAS 67-56-1
NPU16749

B—Methanol; subst.c. = ? mmol/l

Water(drinking)—
Methanol;
substance concentration nanomole/litre
$M = 32.04\ \text{g/mol}$
Other term(s): Carbinol; Columbian spirits; Methyl alcohol; Pyroligneous spirit; Wood alcohol; Wood naphtha; Wood spirit
Note(s): CAS 67-56-1
NPU16750

Water(drinking)—Methanol; subst.c. = ? nmol/l

Air(ambient)—
Methyl bromide;
substance concentration micromole/cubic metre
$M = 94.95\ \text{g/mol}$
Other term(s): Bromomethane; Monobromoethane
Note(s): CAS 74-83-9
NPU16753

Air(amb)—Methyl bromide; subst.c. = ? µmol/m$^3$

Water(drinking)—
Methyl bromide;
substance concentration nanomole/litre
$M = 94.95\ \text{g/mol}$
Other term(s): Bromomethane; Monobromoethane
Note(s): CAS 74-83-9
NPU16754

Water(drinking)—Methyl bromide; subst.c. = ? nmol/l

Air(ambient)—
Methyl isobutyl ketone;
substance concentration millimole/cubic metre
$M = 100.16\ \text{g/mol}$
Other term(s): 4-Methylpentan-2-one; 4-Methyl-2-pentanone
Note(s): CAS 108-10-1
NPU16755

Air(amb)—Methyl isobutyl ketone; subst.c. = ? µmol/m$^3$
Water (drinking)—
Methyl isobutyl ketone;
substance concentration
nanomole/litre
$M = 100.16 \text{ g/mol}$
Other term(s): 4-Methylpentan-2-one; 4-Methyl-2-pentanone
Note(s): CAS 108-10-1
NPU16756
Water (drinking)—Methyl isobutyl ketone; subst. c. = ? nmol/l

Air (ambient)—
Methylene chloride;
substance concentration
micromole/cubic metre
$M = 84.93 \text{ g/mol}$
Other term(s): Dichloromethane; Methylene dichloride
Note(s): CAS 75-09-2
NPU16757
Air (ambient)—Methylene chloride; subst. c. = ? µmol/m³

Urine—
3,4-
Methylenedioxamfetamine;
arbitrary concentration (0 1; procedure)
$M = 179.22 \text{ g/mol}$
Other term(s): 1-Benzо[1,3]dioxol-5-ylpropan-2-amine; MDA
Authority: INN
Note(s): CAS 4764-17-4
NPU04927
U—3,4-Methylenedioxamfetamine; arb.c.(0 1; proc.) = ?

Urine—
3,4-
Methylenedioxethamfetamine;
arbitrary concentration (0 1; procedure)
$M = 207.27 \text{ g/mol}$
Other term(s): 1-Benzо[1,3]dioxol-5-yl-N-ethylpropan-2-amine; MDE; MDEA
Authority: INN
Note(s): CAS 14089-52-2
NPU08923
U—3,4-Methylenedioxethamfetamine; arb.c.(0 1; proc.) = ?

Urine—
3,4-
Methylenedioxymamfetamine;
arbitrary concentration (0 1; procedure)
$M = 193.25 \text{ g/mol}$
Other term(s): 1-Benzо[1,3]dioxol-5-yl-N-methylpropan-2-amine; MDMA; Ecstasy
Authority: INN
Note(s): CAS 42542-10-9
NPU04701
U—3,4-Methylenedioxymamfetamine; arb.c. (0 1; proc.) = ?

Blood—
Methylmercury chloride;
substance concentration
nanomole/litre
$M = 251.08 \text{ g/mol}$
Note(s): CAS 115-09-3
NPU16758
B—Methylmercury chloride; subst. c. = ? nmol/l

Cells (Blood)—
Methylmercury chloride;
substance content
nanomole/kilogram
$M = 251.08 \text{ g/mol}$
Note(s): CAS 115-09-3
NPU16759
Cells (B)—Methylmercury chloride; subst. cont. = ? nmol/kg

Food (specification)—
Methylmercury chloride;
substance content
nanomole/kilogram
$M = 251.08 \text{ g/mol}$
Note(s): CAS 115-09-3
NPU16760
Food (specification)—Methylmercury chloride; subst. cont. = ? nmol/kg

Hair—
Methylmercury chloride;
substance content
nanomole/kilogram
$M = 251.08 \text{ g/mol}$
Note(s): CAS 115-09-3
NPU16761
Hair—Methylmercury chloride; subst. cont. = ? nmol/kg

Plasma—
Methylmercury chloride;
substance concentration
nanomole/litre
$M = 251.08 \text{ g/mol}$
Note(s): CAS 115-09-3
NPU16762
P—Methylmercury chloride; subst. c. = ? nmol/l

Air (ambient)—
2-
Methylpropan-2-ol;
substance concentration
millimole/cubic metre
$M = 74.12 \text{ g/mol}$
Other term(s): tert-Butyl alcohol; Trimethyl carbinol
Note(s): CAS 75-65-0

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NPU16765
Air(amb)—2-Methylpropan-2-ol; subst.c. = \( ? \) mmol/m\(^3\)

**Water(drinking)—**

2-Methylpropan-2-ol;
substance concentration
micromole/litre

\( M = 74.12 \text{ g/mol} \)

Other term(s): tert-Butyl alcohol; Trimethyl carbinol

Note(s): CAS 75-65-0

NPU16766
Water(drinking)—2-Methylpropan-2-ol; subst.c. = \( ? \) \( \mu \text{mol/l} \)

**Water(drinking)—**

Mirex;
substance concentration
nanomole/litre

\( M = 545.59 \text{ g/mol} \)

Other term(s):

Dodecachloropentacyclo[5.3.0.0\text{2,6}.0\text{3,9}.0\text{4,8}\text{]de}

cane; Perchloropentacyclo

\[ 5.3.0.0\text{2,6}.0\text{3,9}.0\text{4,8}\text{]decane; CG-1283; Dechlorane; ENT-025719; Hexachloropentadiene dimer Authority: ISO Note(s): CAS 2385-85-5

NPU16767
Water(drinking)—Mirex; subst.c. = \( ? \) nmol/l

**Plasma—**

Morphine(total);
substance concentration
micromole/litre

\( M(\text{Morphine}) = 285.34 \text{ g/mol} \)

Other term(s):

4,5-Epoxy-17-methyl-7,8-

didehydromorphinan-3,6-diol; Dolcontin;
Duromorph; Morphia; Morphia; Morphium;
Nepenthe

Authority: INN

Note(s): CAS 57-27-2; Total: non-glucuronidated and glucuronidated

NPU09345
P—Morphine(tot.); subst.c. = \( ? \) \( \mu \text{mol/l} \)

**Urine—**

Morphine(total);
arbitrary concentration(0 1; procedure)
micromole/litre

\( M(\text{Morphine}) = 285.34 \text{ g/mol} \)

Other term(s):

4,5-Epoxy-17-methyl-7,8-

didehydromorphinan-3,6-diol; Dolcontin;
Duromorph; Morphia; Morphia; Morphium;
Nepenthe

Authority: INN

Note(s): Analogue are Codeine; Diamorphine;
Dihydrocodeine; Ethylmorphine; Hydrocodone;
Hydromorphone; Levallophan; Levorphanol;
Nalorphine; Normorphine; Oxycodeone

NPU08985
U—Morphine(tot.); subst.c. = \( ? \) \( \mu \text{mol/l} \)

**Urine—**

Morphine and analogue;
arbitrary concentration(0 1; procedure)

Other term(s): Opiates

Authority: INN

Note(s): Analogue are Codeine; Diamorphine;
Dihydrocodeine; Ethylmorphine; Hydrocodone;
Hydromorphone; Levallophan; Levorphanol;
Nalorphine; Normorphine; Oxycodeone

NPU08994
U—Morphine and analogue; arb.c.(0 1; proc.) = \( ? \)

**Urine—**

Morphine and analogue;
substance concentration
micromole/litre

Other term(s): Opiates

Authority: INN

Note(s): Analogue are Codeine; Diamorphine;
Dihydrocodeine; Ethylmorphine; Hydrocodone;
Hydromorphone; Levallophan; Levorphanol;
Nalorphine; Normorphine; Oxycodeone

NPU08988
U—Morphine and analogue; subst.c. = \( ? \) \( \mu \text{mol/l} \)

**Urine—**

Morphine and analogue;
taxon(procedure)

Other term(s): Opiates

Authority: INN

Note(s): Analogue are Codeine; Diamorphine;
Dihydrocodeine; Ethylmorphine; Hydrocodone;
Hydromorphone; Levallophan; Levorphanol;
Nalorphine; Normorphine; Oxycodeone

NPU08991
U—Morphine and analogue; taxon(proc.) = \( ? \)

**Air(ambient)—**

Morpholine;
substance concentration
micromole/cubic metre

\( M = 87.12 \text{ g/mol} \)
Other term(s): Diethylenimide oxide; Diethylene imidoxide; Diethylene oximide; 1-Oxa-4-azacyclohexane; Tetrahydro-2H-1,4-oxazine; Tetrahydro-1,4-oxazine
Authority: INN
Note(s): CAS 110-91-8
NPU16768
Air(amb)—Morpholine; subst.c. = ? µmol/m³

Water(drinking)—Morpholine; subst.c. = ? µmol/m³

Plasma—
Nickel(II); subst.c. = ? nmol/l

Urine—
Nickel(II); subst.c. = ? nmol/l

Air(ambient)—
Nickel((0, II and III) dust and fume); subst.c. = ? nmol/m³

Water(drinking)—
Nickel(II and III); subst.c. = ? nmol/l

Note(s): CAS 7440-02-0 (element); Atomic mass for elemental nickel
NPU16771
Water(drinking)—Nickel(II and III); subst.c. = ? µmol/l

Air(ambient)—
Nickel carbonyl; subst.c. = ? nmol/m³

Nicotine;
subst.c. = ? µmol/l

U—Nickel carbonyl; subst.c. = ? nmol/m³

Air(ambient)—
Nicotine; subst.c. = ? µmol/m³

Urine—
Nicotine; subst.c. = ? µmol/l

U—Nicotine; subst.c. = ? µmol/l

Water(drinking)—
Nicotine; subst.c. = ? µmol/l

Water(drinking)—
Nitrate; subst.c. = ? µmol/l

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micromole/litre

\( M = 62.01 \text{ g/mol}\)

Note(s): CAS 7697-37-2 (nitric acid)

**NPU16775**

Water(drinking)—Nitrate; subst.c. = ? \( \mu \text{mol/l} \)

**Air(ambient)—**

Nitric oxide;

substance concentration
millimole/cubic metre
\( M = 30.01 \text{ g/mol}\)

Other term(s): Mono nitrogen monoxide;
Nitrogen monoxide

Note(s): CAS 10102-43-9

**NPU16776**

Air(amb)—Nitric oxide; subst.c. = ? mmol/m³

**Water(drinking)—**

Nitrite;

substance concentration
micromole/litre
\( M = 45.01 \text{ g/mol}\)

Note(s): CAS 7782-77-6 (nitrous acid)

**NPU16777**

Water(drinking)—Nitrite; subst.c. = ? \( \mu \text{mol/l} \)

**Air(ambient)—**

Nitrogen dioxide;

substance concentration
micromole/cubic metre
\( M = 46.01 \text{ g/mol}\)

Other term(s): Dinitrogen tetroxide; Nitrogen peroxide

Note(s): CAS 10102-44-0

**NPU16778**

Air(amb)—Nitrogen dioxide; subst.c. = ? \( \mu \text{mol/m}³ \)

**Air(ambient)—**

1-Nitropropane;

substance concentration
millimole/cubic metre
\( M = 89.09 \text{ g/mol}\)

Other term(s): Dimethyl nitromethane; iso-Nitropropane; 2-NP

Note(s): CAS 79-46-9

**NPU16781**

Air(amb)—2-Nitropropane; subst.c. = ? mmol/m³

**Water(drinking)—**

1-Nitropropane;

substance concentration
micromole/litre
\( M = 89.09 \text{ g/mol}\)

Other term(s): Dimethyl nitromethane; iso-Nitropropane; 2-NP

Note(s): CAS 79-46-9

**NPU16782**

Water(drinking)—2-Nitropropane; subst.c. = ? nmol/l

**Air(ambient)—**

Nitrous oxide;

substance concentration
millimole/cubic metre
\( M = 44.01 \text{ g/mol}\)

Other term(s): Dinitrogen oxide; Dinitrogen monoxide; Hyponitrous acid anhydride; Laughing gas

Note(s): CAS 10024-97-2

**NPU16783**

Air(amb)—Nitrous oxide; subst.c. = ? mmol/m³

**Air(ambient)—**

Oxalate;

substance concentration
micromole/cubic metre
\( M(\text{oxalic acid}) = 88.04 \text{ g/mol}\)

Other term(s): Ethanedioate

Note(s): CAS 144-62-7 (oxalic acid)

**NPU16784**

Air(amb)—Oxalate; subst.c. = ? \( \mu \text{mol/m}³ \)

**Plasma—**

Oxalate;

substance concentration
micromole/litre
\( M(\text{oxalic acid}) = 88.04 \text{ g/mol}\)

Other term(s): Ethanedioate

Note(s): CAS 144-62-7 (oxalic acid); Molar mass for oxalic acid

**NPU16785**

P—Oxalate; subst.c. = ? nmol/l

**Urine—**

Oxalate;
**substance concentration nanomole/litre**

*M*(oxalic acid) = 88.04 g/mol

Other term(s): Ethanedioate

Note(s): CAS 144-62-7 (oxalic acid)

**NPU16786**

U—Oxalate; subst.c. = ? nmol/l

**Water(drinking)**

Oxalate;

*substance concentration nanomole/litre*

*M*(oxalic acid) = 88.04 g/mol

Other term(s): Ethanedioate

Note(s): CAS 144-62-7 (oxalic acid)

**NPU16787**

Water(drinking)—Oxalate; subst.c. = ? nmol/l

**Air(ambient)—**

Ozone;

*substance concentration micromole/cubic metre*

*M* = 48.00 g/mol

Other term(s): Trioxogen; Triatomic oxygen

Note(s): CAS 10028-15-6

**NPU16788**

Air(amb)—Ozone; subst.c. = ? µmol/m³

**Plasma—**

Paracetamol;

*substance concentration millimole/litre*

*M* = 151.17 g/mmol

Abensanil; Acamol; Acetalgin;

*p*-Acetaminophen; Acetaminophen;

*p*-Acetylaminoacetophenol; N-Acetyl-aminophenol;

*p*-Acetylsalicylic acid; Alprinyl; Amadil; Analgin;

Ampil; Apamide; APAP; Ben-u-ron; Bickie-mol;

Calpol; Captin; Cetadol; Claratal; Dafalgan; Daril;

Dirox; Disprol; Doliprane; Dolprox; Dymadon;

Eneldo; Eneril; Eu-mid; Exdol; Febrilex; Finimal;

Gelocatil; Hexed; Homoolan;

*p*-Hydroxyacetanilide; Korum; Momentum;

Naprinol; Nobedon; Ortsensan; Pamelol; Paldesic;

Panadol; Panaleve; Panasorb; Panets; Panex;

Panidil; Paraspen; Parelron; Parmol; Tralgol;

Tyleanol; Valadol

Authority: INN

Note(s): CAS 103-90-2

**NPU16789**

Plasma—Paracetamol; subst.c. = mmol/l

**Urine—**

Paraquat;

*arbitrary concentration (0 1; procedure)*

*M* = 186.00 g/mol

Other term(s): 1,1'-Dimethyl-4,4'-bipyridinium dichloride; *N*,*N*' -Dimethyl-4,4'-bipyridinium dichloride; Methylviologen dichloride hydrate; Paraquat chloride; Paraquat dichloride

Authority: ISO

Note(s): CAS 1910-42-5

**NPU16790**

U—Paraquat; arb.c.(0 1; proc.) = ?

**Air(ambient)—**

Paraquat;

*substance concentration micromole/cubic metre*

*M* = 186.00 g/mol

Other term(s): 1,1'-Dimethyl-4,4'-bipyridinium dichloride; *N*,*N*' -Dimethyl-4,4'-bipyridinium dichloride; Methylviologen dichloride hydrate; Paraquat chloride; Paraquat dichloride

Authority: ISO

Note(s): CAS 1910-42-5

**NPU16791**

Air(amb)—Paraquat; subst.c. = ? µmol/m³

**Water(drinking)—**

Paraquat;

*substance concentration nanomole/litre*

*M* = 291.27 g/mol

Other term(s): O,O'-Diethyl O-(4-nitrophenyl) phosphorothioate; Diethyl parathion; Ethyl parathion; Parathion-ethyl

Authority: ISO

Note(s): CAS 56-38-2

**NPU16792**

Air(amb)—Parathion; subst.c. = ? µmol/m³

**Water(drinking)—**

Parathion;

*substance concentration micromole/cubic metre*

*M* = 291.27 g/mol

Other term(s): O,O'-Diethyl O-(4-nitrophenyl) phosphorothioate; Diethyl parathion; Ethyl parathion; Parathion-ethyl

Authority: ISO

Note(s): CAS 56-38-2

**NPU16793**

Air(amb)—Parathion; subst.c. = ? µmol/m³

**Water(drinking)—**

Parathion;

*substance concentration nanomole/litre*

*M* = 291.27 g/mol

Other term(s): O,O'-Diethyl O-(4-nitrophenyl) phosphorothioate; Diethyl parathion; Ethyl parathion; Parathion-ethyl

Authority: ISO

Note(s): CAS 56-38-2

**NPU16794**

Water(drinking)—Parathion; subst.c. = ? nmol/l
Air(ambient)—
Parathion-methyl;
substance concentration
micromole/cubic metre
\( M = 263.23 \text{ g/mol} \)
Other term(s): O,O-Dimethyl O-(4-nitrophenyl) phosphorothioate; Azophos; Methylparathion
Authority: ISO
Note(s): CAS 298-00-0
NPU16763
Air(amb)—Parathion-methyl; subst.c. = ? µmol/m³

Water(drinking)—
Parathion-methyl;
substance concentration
nanomole/litre
\( M = 263.23 \text{ g/mol} \)
Other term(s): O,O-Dimethyl O-(4-nitrophenyl) phosphorothioate; Azophos; Methylparathion
Authority: ISO
Note(s): CAS 298-00-0
NPU16764
Water(drinking)—Parathion-methyl; subst.c. = ? nmol/l

Air(ambient)—
Particulate matter(<10 µm aerodynamic diameter, specification)
mass concentration(procedure)
milligram/cubic metre
Other term(s): “Inert” dust; Nuisance dust; PM10; PNOR
Authority: ACGIH
NPU16795
Air(amb)—Particulate matter(< 10 µm aerodyn. diam., spec.); mass.c.(proc.) = ? mg/m³

Air(ambient)—
Particulate matter(<2.5 µm aerodynamic diameter, specification)
mass concentration(procedure)
milligram/cubic metre
Other term(s): “Inert” dust; Nuisance dust; PM2.5; PNOR
Authority: ACGIH
NPU16796
Air(amb)—Particulate matter(< 2.5 µm aerodyn. diam., spec.); mass.c.(proc.) = ? mg/m³

Air(ambient)—
Particulate matter(<0.1 µm aerodynamic diameter, specification)
mass concentration(procedure)
milligram/cubic metre
Other term(s): Ultrafine dust
Authority: ACGIH
NPU16797

Air(ambient)—
Phenol;
substance concentration
micromole/cubic metre
\( M = 94.11 \text{ g/mol} \)
Other term(s): Benzenol; Carbolic acid; Hydroxybenzene; Monohydroxybenzene; Phenic acid; Phenyl alcohol; Phenyl hydroxide; phenylic acid
Note(s): CAS 108-95-2

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NPU16801
Air(amb)—Phenol; subst.c. = ? µmol/m³

Water(drinking)—
Phenol;
substance concentration
nanomole/litre
\( M = 94.11 \text{ g/mol} \)
Other term(s): Benzenol; Carbolic acid; Hydroxybenzene; Monohydroxybenzene; Phenic acid; Phenyl alcohol; Phenyl hydroxide; Phenyllic acid
Note(s): CAS 108-95-2

NPU16802
Water(drinking)—Phenol; subst.c. = ? nmol/l

Urine—
Phenothiazines;
arbitrary concentration(0 1; procedure)
\( M(\text{Phenothiazine}) = 199.28 \text{ g/mol} \)
Other term(s): Forrest reactive compounds
Authority: INN
Note(s): CAS 92-84-2 (phenothiazine); Molar mass is for phenothiazine; Examples are Fluphenazin; Levomepromazin; Perazin; Perphenazin; Thoridazin

NPU16803
Urine—Phenothiazines; arb.c.(0 1; proc.) = ?

Urine—
Phenylmercapturic acid;
substance concentration
nanomole/litre
\( M = 239.30 \text{ g/mol} \)
Other term(s): N-Acetyl-S-phenyl-L-cysteine; 2-Acetamido-3-(phenylsulfanyl)propanoic acid; 2-Acetamido-3-phenylthiopropanoic acid
Note(s): CAS 4775-80-8

NPU16804
U—Phenylmercapturic acid; subst.c. = ? nmol/l

Air(ambient)—
Phosgene;
substance concentration
micromole/cubic metre
\( M = 98.92 \text{ g/mol} \)
Other term(s): Carbonyl dichloride; Carbon chloride oxide; Carbon oxychloride; Carbonic acid dichloride; Carbonic dichloride; Carbonodichloric acid; Carbonyl chloride; Chloroformyl chloride; Dichloroformaldehyde, Green Cross; GC
Note(s): CAS 75-44-5

NPU16805
Air(amb)—Phosgene; subst.c. = ? µmol/m³

Air(ambient)—
Phosphane;
substance concentration
micromole/cubic metre
\( M = 34.00 \text{ g/mol} \)
Other term(s): Hydrogen phosphide; Phosphine; Phosphorated hydrogen; Phosphorous hydride; Phosphorus trihydride; Trihydridophosphorus
Note(s): CAS 7803-51-2

NPU16806
Air(amb)—Phosphane; subst.c. = ? µmol/m³

Water(drinking)—
Phosphane;
substance concentration
micromole/litre
\( M = 34.00 \text{ g/mol} \)
Other term(s): Hydrogen phosphide; Phosphine; Phosphorated hydrogen; Phosphorous hydride; Phosphorus trihydride; Trihydridophosphorus
Note(s): CAS 7803-51-2

NPU16807
Water(drinking)—Phosphane; subst.c. = ? nmol/l

Air(ambient)—
Polychlorinated biphenyls;
substance concentration
nanomole/cubic metre
\( M = 291.38–360.86 \text{ g/mol} \)
Other term(s): Aroclor; Chlorinated biphenyls; Chlorobiphenyls; Clophen; Fenclor; Kanechlor; PCBs; Pyralene
Note(s): CAS 1336-36-3; Molecular mass range for possible molecules

NPU16808
Air(amb)—Polychlorinated biphenyls; subst.c. = ? nmol/m³

Food(specification)—
Polychlorinated biphenyls;
substance content
nanomole/kg
\( M(\text{interval}) = 291.38–360.86 \text{ g/mol} \)
Other term(s): Aroclor; Chlorinated biphenyls; Chlorobiphenyls; Clophen; Fenclor; Kanechlor; PCBs; Pyralene
Note(s): CAS 1336-36-3; Molecular mass range for possible molecules

NPU16809
Food(specification)—Polychlorinated biphenyls; subst.cont. = ? nmol/kg

Water(drinking)—
Polychlorinated biphenyls;
substance concentration
nanomole/litre
\( M(\text{interval}) = 291.38–360.86 \text{ g/mol} \)
Other term(s): Aroclor; Chlorinated biphenyls; Chlorobiphenyls; Clophen; Fenclor; Kanechlor; PCBs; Pyralene
Note(s): CAS 1336-36-3; Molecular mass range for possible molecules

NPU16810
Water (drinking)—Polychlorinated biphenyls; subst. c. = ? nmol/l

Air (ambient)—
Propan-1-ol;
substance concentration
millimole/cubic metre
$M = 60.09 \text{ g/mol}$
Other term(s): Ethyl carbinol; $n$-Propanol; $n$-Propyl alcohol; Propyl alcohol
Note(s): CAS 71-23-8
NPU16811
Air (amb)—Propan-1-ol; subst. c. = ? mmol/m$^3$

Water (drinking)—
Propan-1-ol;
substance concentration
nanomole/litre
$M = 60.09 \text{ g/mol}$
Other term(s): Ethyl carbinol; $n$-Propanol; $n$-Propyl alcohol; Propyl alcohol
Note(s): CAS 71-23-8
NPU16812
Water (drinking)—Propan-1-ol; subst. c. = ? nmol/l

Air (ambient)—
Propan-2-ol;
substance concentration
millimole/cubic metre
$M = 60.09 \text{ g/mol}$
Other term(s): Dimethyl carbinol; IPA; Isopropanol; Isopropyl alcohol; sec-Propyl alcohol; Rubbing alcohol
Note(s): CAS 67-63-0
NPU16813
Air (amb)—Propan-2-ol; subst. c. = ? mmol/m$^3$

Water (drinking)—
Propan-2-ol;
substance concentration
nanomole/litre
$M = 60.09 \text{ g/mol}$
Other term(s): Dimethyl carbinol; IPA; Isopropanol; Isopropyl alcohol; sec-Propyl alcohol; Rubbing alcohol
Note(s): CAS 67-63-0
NPU16814
Water (drinking)—Propan-2-ol; subst. c. = ? nmol/l

Plasma—
Propoxyphene;
substance concentration
millimole/litre
$M = 339.48 \text{ g/mol}$
Other term(s): (+)-(2$S,3R$)-4-(Dimethylamino)-3-methyl-1,2-diphenylbutan-2-yl propionate hydrochloride; Dextropropoxyphene; a-d-Propoxyphene
Authority: INN
Note(s): CAS 469-62-5
NPU16616
Plasma—Prooxyphene; subst. c. = ? mmol/l

Urine—
Propoxyphene;
substance concentration
millimole/litre
$M = 339.48 \text{ g/mol}$
Other term(s): (+)-(2$S,3R$)-4-(Dimethylamino)-3-methyl-1,2-diphenylbutan-2-yl propionate hydrochloride; Dextropropoxyphene; a-d-Propoxyphene
Authority: INN
Note(s): CAS 469-62-5
NPU16617
U—Propoxyphene; subst. c. = ? mmol/l

Air (ambient)—
Propylene oxide;
substance concentration
millimole/cubic metre
$M = 58.08 \text{ g/mol}$
Other term(s): 2-Methyloxirane; Methyl ethylene oxide; Methylene oxide; Propene oxide; 1,2-Propylene oxide
Note(s): CAS 75-56-9
NPU16815
Air (amb)—Propylene oxide; subst. c. = ? mmol/m$^3$

Water (drinking)—
Propylene oxide;
substance concentration
nanomole/litre
$M = 58.08 \text{ g/mol}$
Other term(s): 2-Methyloxirane; Methyl ethylene oxide; Methylene oxide; Propene oxide; 1,2-Propylene oxide
Note(s): CAS 75-56-9
NPU16816
Water (drinking)—Propylene oxide; subst. c. = ? nmol/l

Plasma—
Salicylate;
substance concentration
millimole/litre
$M$ (salicylic acid) = 137.12 g/mol
Other term(s): 2-Hydroxybenzoate; Keralyt; Occlusal; Verrugon
Authority: INN
Note(s): CAS 69-72-7 (salicylic acid)
NPU16817
Plasma—Salicylate; subst. c. = ? mmol/l

Air (ambient)—
Sarin;
substance concentration
picomole/cubic metre
$M = 140.09 \text{ g/mol}$
Other term(s): Isopropyl methylphosphonofluoridate; isopropoxymethylphosphoryl fluoride; GB; Methylphosphonofluoridic acid 1-methyl-ethyl ester
Note(s): CAS 107-44-8

Air(amb)—Sarin; subst.c. = ? pmol/m³

Food(specification)—
Saxitoxin;
substance content
nanomole/kilogram
Other term(s): (3aS,4R,10aS)-2,6-diamino-4-[[carbamoyloxy]methyl]-3a,4,8,9-tetrahydro-1H,10H-pyrrrol[1,2-c]purine-10,10-diol; (3aS,4R,10aS)-2,6-diamino-4-[[aminocarbonyl]oxy]methyl]-3a,4,8,9-tetrahydro-1H,10H-pyrrrol[1,2-c]purine-10,10-diol; Clam poison; Gonyaulax toxin; Mussel poison; Paralytic shellfish poison; PSP; STX

M = 299.30 g/mol
Note(s): CAS 35523-89-8

Air(ambient)—
Selenium(IV and VI);
substance concentration
nanomole/litre
A = 78.96 g/mol
Note(s): CAS 7782-49-2 (element); Atomic mass for elemental selenium

Plasma—
Selenium(IV and VI);
substance concentration
micromole/litre
A = 78.96 g/mol
Note(s): CAS 7782-49-2 (element); Atomic mass for elemental selenium

Urine—
Selenium(IV and VI);
substance concentration
micromole/litre
A = 78.96 g/mol
Note(s): CAS 7782-49-2 (element); Atomic mass for elemental selenium

Water(drinking)—
Selenium(IV and VI);
substance concentration
micromole/litre
A = 78.96 g/mol
Note(s): CAS 7782-49-2 (element); Atomic mass for elemental selenium

Air(ambient)—
Silica(IV), crystalline respirable dust(procedure);
mass concentration(procedure)

Other term(s): Cristobalite; Quartz; Tridymite; Tripoli
Authority: ACGIH
Note(s): CAS 14464-46-1; 14808-60-7; 15468-32-3; 1317-95-9

Air(ambient)—
Silver(0, I, and II);
substance concentration
nanomole/cubic metre
A = 107.87 g/mol
Note(s) 1: CAS 7440-22-4 (element); Atomic mass for elemental silver

**NPU16823**

Air(amb)—Silver(0, I, and II); subst.c. = ? nmol/m³

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**Blood—**

Silver(I and II);

substance concentration
nanomole/litre

\[ A = 107.87 \text{ g/mol} \]

Note(s) 1: CAS 7440-22-4 (element); Atomic mass for elemental silver

**NPU16941**

B—Silver(I and II); subst.c. = ? nmol/l

---

**Plasma—**

Silver(I and II);

substance concentration
nanomole/litre

\[ A = 107.87 \text{ g/mol} \]

Note(s) 1: CAS 7440-22-4 (element); Atomic mass for elemental silver

**NPU16931**

P—Silver(I and II); subst.c. = ? nmol/l

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**Urine—**

Silver(I and II);

substance concentration
nanomole/litre

\[ A = 107.87 \text{ g/mol} \]

Note(s) 1: CAS 7440-22-4 (element); Atomic mass for elemental silver

**NPU16942**

U—Silver(I and II); subst.c. = ? nmol/l

---

**Water(drinking)—**

Silver(I and II);

substance concentration
nanomole/litre

\[ A = 107.87 \text{ g/mol} \]

Note(s) 1: CAS 7440-22-4 (element); Atomic mass for elemental silver

**NPU16824**

Water(drinking)—Silver(I and II); subst.c. = ? nmol/l

---

**Cells(blood)—**

Strontium(II);

substance content
nanomole/kilogram

\[ A = 87.62 \text{ g/mol} \]

Note(s) 1: CAS 7440-24-6 (element); Atomic mass for elemental strontium

**NPU16954**

Cells(b)—Strontium(II); subst.cont. = ? nmol/kg

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**Plasma—**

Strontium(II);

substance concentration
nanomole/litre

\[ A = 87.62 \text{ g/mol} \]

Note(s) 1: CAS 7440-24-6 (element); Atomic mass for elemental strontium

**NPU16932**

P—Strontium(II); subst.c. = ? nmol/l

---

**Air(ambient)—**

Strychnine;

substance concentration
nanomole/cubic metre

\[ M = 334.42 \text{ g/mol} \]

Other term(s): Strychnidin-10-one

Authority: INN

Note(s): CAS 57-24-9

**NPU04642**

U—Strychnine; arb.c.(0 1; proc.) = ?

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**Urine—**

Strychnine;

arbitrary concentration(0 1; procedure)

\[ M = 334.42 \text{ g/mol} \]

Other term(s): Strychnidin-10-one

Authority: INN

Note(s): CAS 57-24-9

**NPU03497**

U—Strychnine; subst.c. = ? µmol/l

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**Water(drinking)—**

Strychnine;

substance concentration
micromole/litre

\[ M = 334.42 \text{ g/mol} \]

Other term(s): Strychnidin-10-one

Authority: INN

Note(s): CAS 57-24-9

**NPU16828**

Water(drinking)—Strychnine; subst.c. = ? nmol/l

---

**Air(ambient)—**

Styrene;

substance concentration
micromole/cubic metre

\[ M = 104.15 \text{ g/mol} \]

Other term(s): Ethynylbenzene; Cinnamene; Cinnamol; Phenylethylene; Styrene monomer; Styrol; Styrolene; Vinylbenzene

Note(s): CAS 100-42-5

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Properties and units in clinical and environmental human toxicology

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NPU16829
Air(amb)—Styrene; subst.c. = ? μmol/m³

Water(drinking)—
Styrene;
substance concentration
nanomole/litre
\( M = 104.15 \) g/mol
Other term(s): Ethenylbenzene; Cinnamene;
Cinnamol; Phenylethylene; Styrene monomer;
Styril; Styrolene; Vinylbenzene
Note(s): CAS 100-42-5
NPU16830
Water(drinking)—Styrene; subst.c. = ? nmol/l

Air(ambient)—
Sulfur dioxide;
substance concentration
micromole/cubic metre
\( M = 64.07 \) g/mol
Note(s): CAS 7446-09-6

NPU16831
Air(amb)—Sulfur dioxide; subst.c. = ? μmol/m³

Tecnazene;
substance concentration
nanomole/cubic metre
\( M = 260.88 \) g/mol
Other term(s): 1,2,4,5-Tetrachloro-3-nitrobenzene; TCNB
Authority: ISO
Note(s): CAS 117-18-0
NPU16832
Air(amb)—Tecnazene; subst.c. = ? nmol/m³

Water(drinking)—
Tecnazene;
substance concentration
nanomole/litre
\( M = 260.88 \) g/mol
Other term(s): 1,2,4,5-Tetrachloro-3-nitrobenzene; TCNB
Authority: ISO
Note(s): CAS 117-18-0
NPU16833
Water(drinking)—Tecnazene; subst.c. = ? nmol/l

Air(ambient)—
2,3,7,8-
Tetrachlorodibenzo-p-dioxin;
substance concentration
nanomole/cubic metre
\( M = 321.97 \) g/mol
Other term(s): 2,3,7,8-Tetrachlorooxanthrene;
2,3,7,8-Tetrachlorodibenzo[b,e][1,4]dioxine;
Dioxin; Dioxine; TCDD; TCDD; TCDD;
2,3,7,8-TCDD; 2,3,6,7-Tetrachlorodibenzo-dioxin
Note(s): CAS 1746-01-6
NPU16835
Food(specification)—2,3,7,8-
Tetrachlorodibenzo-p-dioxin;
substance content
micromole/kg
\( M = 321.97 \) g/mol
Other term(s): 2,3,7,8-Tetrachlorooxanthrene;
2,3,7,8-Tetrachlorodibenzo[b,e][1,4]dioxine;
Dioxin; Dioxine; TCDD; TCDD; TCDD;
2,3,7,8-TCDD; 2,3,6,7-Tetrachlorodibenzo-dioxin
Note(s): CAS 1746-01-6
NPU16836
Air(amb)—2,3,7,8-
Tetrachlorodibenzo-p-dioxin; subst.c. = ? nmol/m³

Water(drinking)—
2,3,7,8-
Tetrachlorodibenzo-p-dioxin;
substance concentration
nanomole/litre
\( M = 321.97 \) g/mol
Other term(s): 2,3,7,8-Tetrachlorooxanthrene;
2,3,7,8-Tetrachlorodibenzo[b,e][1,4]dioxine;
Dioxin; Dioxine; TCDD; TCDD; TCDD;
2,3,7,8-TCDD; 2,3,6,7-Tetrachlorodibenzo-dioxin
Note(s): CAS 1746-01-6
NPU16837
Air(amb)—Tetrachloroethylene; subst.c. = ? mmol/m³

Water(drinking)—
2,3,7,8-
Tetrachlorodibenzo-p-dioxin; subst.c. = ? nmol/l

Air(ambient)—
1,1,2,2-
Tetrachloroethylene;
substance concentration
millimole/cubic metre
\( M = 165.83 \) g/mol
Other term(s): Tetrachloroethene;
Perchlorethylene; Perchloroethylene; Perk;
Tetrachlorethylene
Note(s): CAS 127-18-4
NPU16838
Water(drinking)—Tetrachloroethylene; subst.c. = ? nmol/l

Air(ambient)—
1,1,2,2-
Tetrachloroethylene;
substance concentration
nanomole/litre
\( M = 165.83 \) g/mol
Other term(s): Tetrachloroethene;
Perchlorethylene; Perchloroethylene; Perk;
Tetrachlorethylene
Note(s): CAS 127-18-4
NPU16839
Water(drinking)—Tetrachloroethylene; subst.c. = ? nmol/l
Air(ambient)—
Tetraethyllead; substance concentration
nanomole/cubic metre

$M = 323.45 \text{ g/mol}$
Other term(s): Tetraethylplumbane; Lead tetraethyl; TEL
Note(s): CAS 78-00-2
NPU16839
Air(amb)—Tetraethyl lead; subst.c. = ? nmol/m$^3$

Water(drinking)—
Tetraethyllead; substance concentration
nanomole/litre

$M = 323.45 \text{ g/mol}$
Other term(s): Tetraethylplumbane; Lead tetraethyl; TEL
Note(s): CAS 78-00-2
NPU16840
Water(drinking)—Tetraethyl lead; subst.c. = ? nmol/l

Urine—
$\Delta^9$-

Tetrahydrocannabinol; arbitrary concentration(0 1; procedure)

$M = 314.47 \text{ g/mol}$
Authority: INN
Note(s): CAS 5957-75-5; Minor (mass fraction less than 0.01) active constituent in Marihuana (Hashish)
NPU09000
U—$\Delta^9$-Tetrahydrocannabinol; arb.c.(0 1; proc.) = ?

Urine—
$\Delta^9$-

Tetrahydrocannabinol; arbitrary concentration(0 1; procedure)

$M = 314.47 \text{ g/mol}$
Other term(s): Delta-1-tetrahydrocannabinol; Dronabinol
Authority: INN
Note(s): CAS 1972-08-3; Major active constituent in Marihuana (Hashish)
NPU08997
U—$\Delta^9$-Tetrahydrocannabinol; arb.c.(0 1; proc.) = ?

Urine—
$\Delta^9$-

Tetrahydrocannabinol; substance concentration
nanomole/litre

$M = 314.47 \text{ g/mol}$
Other term(s): Delta-1-Tetrahydrocannabinol; Dronabinol; $\delta$-9-Tetrahydrocannabinol
Authority: INN
Note(s): CAS 1972-08-3; Major active constituent in Marihuana (Hashish)
NPU08998
U—$\Delta^9$-Tetrahydrocannabinol; subst.c. = ? nmol/l

Food(specification)—
Tetrodotoxin; substance content
micromole/kilogram

$A = 204.38 \text{ g/mol}$
Note(s): CAS 37740-28-0 (element); Atomic mass for elemental thallium
NPU16889
Air(amb)—Thallium(0, I and III); subst.c. = ? nmol/m$^3$

Blood—
Thallium(I and III); substance concentration
nanomole/litre

$A = 204.38 \text{ g/mol}$
Note(s): CAS 37440-28-0 (element); Atomic mass for elemental thallium
NPU16933
B—Thallium(I and III); subst.c. = ? nmol/l

Hair—
Thallium(I and III); substance content
micromole/kilogram

$A = 204.38 \text{ g/mol}$
Note(s): CAS 37440-28-0 (element); Atomic mass for elemental thallium
NPU16842
Hair—Thallium(I and III); subst.cont. = ? mmol/kg

Urine—
Thallium(I and III); substance concentration
nanomole/litre

$A = 204.38 \text{ g/mol}$
Note(s): CAS 37440-28-0 (element); Atomic mass for elemental thallium
NPU16934
U—Thallium(I and III); subst.c. = ? nmol/l
Air(ambient)—
Tin(II and IV);  
substance concentration  
nanomole/cubic metre  
\( A = 118.71 \text{ g/mol} \)  
Note(s): CAS 7440-31-5 (element); Atomic mass for elemental tin  
NPU16843  
Air(amb)—Tin(II and IV); subst.c. = ? nmol/m³

Plasma—
Tin(II and IV);  
substance concentration  
nanomole/litre  
\( A = 118.71 \text{ g/mol} \)  
Note(s): CAS 7440-31-5 (element); Atomic mass for elemental tin  
NPU16935  
P—Tin(II and IV); subst.c. = ? nmol/l

Air(ambient)—
Toluene;  
substance concentration  
millimole/cubic metre  
\( M = 92.14 \text{ g/mol} \)  
Other term(s): Methylbenzene; Methylbenzol; Phenylmethane; Toluol  
Note(s): CAS 108-88-3  
NPU16844  
Air(amb)—Toluene; subst.c. = ? mmol/m³

Water(drinking)—
Toluene;  
substance concentration  
nanomole/litre  
\( M = 92.14 \text{ g/mol} \)  
Other term(s): Methylbenzene; Methylbenzol; Phenylmethane; Toluol  
Note(s): CAS 108-88-3  
NPU16845  
Water(drinking)—Toluene; subst.c. = ? nmol/l

Air(ambient)—
Toluene 2,4-diisocyanate;  
substance concentration  
micromole/cubic metre  
\( M = 174.16 \text{ g/mol} \)  
Other term(s): 4-Methylbenzene-1,3-diyl disiocyanate; 4-Methyl-1,3-phenylene disiocyanate; 2,4-Diisocyanatotoluene; 2,4-Diisocyanato-1-methyl-benzene; TDI; 2,4-TDI; 2,4-Toluene disiocyanate  
Note(s): CAS 584-84-9  
NPU16847  
Water(drinking)—Toluene 2,4-diisocyanate; subst.c. = ? nmol/l

Air(ambient)—
Toluene 2,6-diisocyanate;  
substance concentration  
micromole/cubic metre  
\( M = 174.16 \text{ g/mol} \)  
Other term(s): 2-Methylbenzene-1,3-diyl disiocyanate; 2-Methyl-1,3-phenylene disiocyanate; 2,6-Diisocyanatotoluene; 2,6-Diisocyanato-1-methyl-benzene; TDI; 2,6-TDI; 2,6-Toluene disiocyanate  
Note(s): CAS 91-08-7  
NPU16848  
Air(amb)—Toluene 2,6-diisocyanate; subst.c. = ? µmol/m³

Water(drinking)—
Toluene 2,6-diisocyanate;  
substance concentration  
nanomole/litre  
\( M = 174.16 \text{ g/mol} \)  
Other term(s): 2-Methylbenzene-1,3-diyl disiocyanate; 2-Methyl-1,3-phenylene disiocyanate; 2,6-Diisocyanatotoluene; 2,6-Diisocyanato-1-methyl-benzene; TDI; 2,6-TDI; 2,6-Toluene disiocyanate  
Note(s): CAS 91-08-7  
NPU16849  
Water(drinking)—Toluene 2,6-diisocyanate; subst.c. = ? nmol/l

Air(ambient)—
Tributyl phosphate;  
substance concentration  
micromole/cubic metre  
\( M = 266.32 \text{ g/mol} \)  
Other term(s): Butyl phosphate; TBP; Tri-n-butyl phosphate  
Note(s): CAS 126-73-8  
NPU16850  
Air(amb)—Tributyl phosphate; subst.c. = ? µmol/m³

Water(drinking)—
Tributyl phosphate;  
substance concentration  
nanomole/litre  
\( M = 266.32 \text{ g/mol} \)
Other term(s): Butyl phosphate; TBP; Tri-n-butyl phosphate
Note(s): CAS 126-73-8

NPU16851
Water(drinking)—Tributyl phosphate; subst.c. = ? nmol/l

Air(ambient)—
Tributyltin oxide;
substance concentration
nanomole/cubic metre
$M = 595.62$ g/mol
Other term(s): Bis(tributyltin) oxide; Biomet
TBTO; Butinox; Hexabutyldistannoxane; OTBE; TBTO
Note(s): CAS 56-35-9

NPU16852
Air(amb)—Tributyltin oxide; subst.c. = ? nmol/m$^3$

Water(environmental)—
Tributyltin oxide;
substance concentration
picomole/litre
$M = 595.62$ g/mol
Other term(s): Bis(tributyltin) oxide; Biomet
TBTO; Butinox; Hexabutyldistannoxane; OTBE; TBTO
Note(s): CAS 56-35-9

NPU16853
Water(environmental)—Tributyltin oxide; subst.c. = ? pmol/l

Air(ambient)—
Trichloroethylene;
substance concentration
micromole/cubic metre
$M = 131.39$ g/mol
Other term(s): 1,1,2-Trichloroethene; Ethylene trichloride; TCE; Trilene
Note(s): CAS 79-01-6

NPU16854
Air(amb)—Trichloroethylene; subst.c. = ? µmol/m$^3$

Water(drinking)—
Trichloroethylene;
substance concentration
nanomole/litre
$M = 131.39$ g/mol
Other term(s): 1,1,2-Trichloroethene; Ethylene trichloride; TCE; Trilene
Note(s): CAS 79-01-6

NPU16855
Water(drinking)—Trichlorofon; subst.c. = ? nmol/l

Air(ambient)—
1,1,2-
Trichloroethene;
substance concentration
nanomole/cubic metre
$M = 133.42$ g/mol
Other term(s): Ethane trichloride; β-Trichloroethane; Vinyl trichloride
Note(s): CAS 79-00-5

NPU16856
Air(amb)—1,1,2-Trichloroethene; subst.c. = ? nmol/m$^3$

Water(drinking)—
1,1,2-
Trichloroethene;
substance concentration
nanomole/litre
$M = 133.42$ g/mol
Other term(s): Ethane trichloride; β-Trichloroethane; Vinyl trichloride
Note(s): CAS 79-00-5

NPU16857
Water(drinking)—1,1,2-Trichloroethene; subst.c. = ? nmol/l

Air(ambient)—
Trichloroethylene;
substance concentration
micromole/cubic metre
$M = 131.39$ g/mol
Other term(s): 1,1,2-Trichloroethene; Ethylene trichloride; TCE; Trilene
Note(s): CAS 79-01-6

NPU16858
Air(amb)—Trichloroethylene; subst.c. = ? µmol/m$^3$
Tri-o-cresyl phosphate
Note(s): CAS 78-30-3

Air(amb)—Tri-ortho-cresyl phosphate; subst.c. = \( ? \) nmol/m\(^3\)

**Water(drinking)—**

**Tri-ortho-cresyl phosphate;**
**substance concentration**
**picomole/litre**

\( M = 368.37 \text{ g/mol} \)

[Other term(s): Tris(2-methylphenyl) phosphate; TCP; TOCP; Tri-o-cresyl ester of phosphoric acid;]

[Note(s): CAS 78-30-3]

NPU16860

Water(drinking)—Tri-ortho-cresyl phosphate; subst.c. = \( ? \) pmol/l

Air(ambient)—

**Triphenyl phosphate;**
**substance concentration**
**micromole/cubic metre**

\( M = 326.28 \text{ g/mol} \)

[Other term(s): Phenyl phosphate; TPP]

Note(s): CAS 115-86-6

NPU16862

Air(amb)—Triphenyl phosphate; subst.c. = \( ? \) µmol/m\(^3\)

**Water(drinking)—**

**Triphenyl phosphate;**
**substance concentration**
**nanomole/litre**

\( M = 326.28 \text{ g/mol} \)

[Other term(s): Phenyl phosphate; TPP]

Note(s): CAS 115-86-6

NPU16863

Water(drinking)—Triphenylphosphate; subst.c. = \( ? \) nmol/l

Air(ambient)—

**Tris(2,3-dibromopropyl) phosphate;**
**substance concentration**
**micromole/cubic metre**

\( M = 697.85 \text{ g/mol} \)

[Other term(s): Apex 462-5; Firemaster LV-T 23P; Firemaster T 23P; Flammex AP; Flammex T 23P; Fyrol HB 32; Phosphoric acid tris(2,3-dibromopropyl) ester; T 23P; Tris-BP; Tris(2,3-dibromopropyl) phosphate]

[Note(s): CAS 126-72-7]

NPU16865

Air(ambient)—Uranium(0, III, IV, V and VI); subst.c. = \( ? \) pmol/l

**Blood—**

**Uranium(IV and VI);**
**substance concentration**
**picomole/litre**

\( A = 238.03 \text{ g/mol} \)

[Note(s): CAS 7440-61-1 (element); Atomic mass for elemental uranium]

NPU16936

Air(amb)—Uranium(IV and VI); subst.c. = \( ? \) nmol/m\(^3\)

**Urine—**

**Uranium(IV and VI);**
**substance concentration**
**picomole/litre**

\( A = 238.03 \text{ g/mol} \)

[Note(s): CAS 7440-61-1 (element); Atomic mass for elemental uranium]

NPU16937

Air(amb)—Uranium(IV and VI); subst.c. = \( ? \) pmol/l

**Air(ambient)—**

**Vinyl chloride monomer;**
**substance concentration**
**micromole/cubic metre**

\( M = 62.50 \text{ g/mol} \)

[Other term(s): Chloroethene; Chloroethylene; Ethylene monochloride; Monochloroethene; Monochloroethylene; VC; VCM]

[Note(s): CAS 75-01-4]

NPU16867

Air(amb)—Vinyl chloride monomer; subst.c. = \( ? \) µmol/m\(^3\)

**Water(drinking)—**

**Vinyl chloride monomer;**
**substance concentration**
**nanomole/litre**

\( M = 62.50 \text{ g/mol} \)
Other term(s): Chloroethene; Chloroethylene; Ethylene monochloride; Monochloroethene; Monochloroethylene; VC; VCM
Note(s): CAS 75-01-4

NPU16868
Water(drinking)—Vinyl chloride monomer; subst.c. = ? nmol/l

Air(ambient)—
Vinyldiene chloride; substance concentration micromole/cubic metre
M = 96.94 g/mol
Other term(s): 1,1-Dichloroethene; 1,1-DCE; 1,1-Dichloroethylene; VDC; Vinyldiene chloride monomer; Vinyldiene dichloride
Note(s): CAS 75-35-4

NPU16869
Air(amb)—Vinyldiene chloride; subst.c. = ? µmol/m³

Air(exhaled)—
Vinyldiene chloride; substance concentration micromole/cubic metre
M = 96.94 g/mol
Other term(s): 1,1-Dichloroethene; 1,1-DCE; 1,1-Dichloroethylene; VDC; Vinyldiene chloride monomer; Vinyldiene dichloride
Note(s): CAS 75-35-4

NPU16870
Air(exh)—Vinyldiene chloride; subst.c. = ? µmol/l

Water(drinking)—
Vinyldiene chloride; substance concentration nanomole/litre
M = 96.94 g/mol
Other term(s): 1,1-Dichloroethene; 1,1-DCE; 1,1-Dichloroethylene; VDC; Vinyldiene chloride monomer; Vinyldiene dichloride
Note(s): CAS 75-35-4

NPU16871
Water(drinking)—Vinyldiene chloride; subst.c. = ? nmol/l

Plasma—
Warfarin; substance concentration micromole/litre
M = 308.33 g/mol
Other term(s): (RS)-2-Hydroxy-3-(3-oxo-1-phenylbutyl)-4H-chromen-4-one; (RS)-3-(α-Acetonylbenzyl)-4-hydroxycoumarin; (RS)-4-Hydroxy-3-(3-oxo-1-phenylbutyl)coumarin; 4-Hydroxy-3-(3-oxo-1-phenylbutyl)-2H-1-benzopyran-2-one; WARF
Authority: INN
Note(s): CAS 81-81-2

NPU16872
P—Warfarin; subst.c. = ? µmol/l

Air(ambient)—
Warfarin; substance concentration nanomole/cubic metre
M = 308.33 g/mol
Other term(s): (RS)-2-Hydroxy-3-(3-oxo-1-phenylbutyl)-4H-chromen-4-one; (RS)-3-(α-Acetonylbenzyl)-4-hydroxycoumarin; (RS)-4-Hydroxy-3-(3-oxo-1-phenylbutyl)coumarin; 4-Hydroxy-3-(3-oxo-1-phenylbutyl)-2H-1-benzopyran-2-one; WARF
Authority: INN
Note(s): CAS 81-81-2

NPU16873
Air(amb)—Warfarin; subst.c. = ? nmol/m³

Water(drinking)—
Warfarin; substance concentration nanomole/litre
M = 308.33 g/mol
Other term(s): (RS)-2-Hydroxy-3-(3-oxo-1-phenylbutyl)-4H-chromen-4-one; (RS)-3-(α-Acetonylbenzyl)-4-hydroxycoumarin; (RS)-4-Hydroxy-3-(3-oxo-1-phenylbutyl)coumarin; 4-Hydroxy-3-(3-oxo-1-phenylbutyl)-2H-1-benzopyran-2-one; WARF
Authority: INN
Note(s): CAS 81-81-2

NPU16888
Water(drinking)—Warfarin; subst.c. = ? nmol/l

Air(ambient)—
Welding fume; mass concentration(procedure) milligram/cubic metre
Authority: ACGIH

NPU16874
Air(amb)—Welding fume; mass c.(proc.) = ? mg/m³

Air(ambient)—
White spirit(specification); mass concentration(procedure) milligram/cubic metre
Other term(s): Dry Cleaning Safety Solvent; Mineral spirits; Petroleum solvent; Spotting naphtha; Stoddard solvent
Note(s): CAS 8052-41-3; White spirit is a mixture of saturated aliphatic and alicyclic C7–C12 hydrocarbons with a mass fraction of 15–20 % of aromatic C7–C12 hydrocarbons and a boiling interval of 130–230 °C; the C9–C11 hydrocarbons (aliphatics, alicyclics and aromatics) are most abundant, constituting a mass fraction of > 0,80 of the total

NPU16875

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Air(amb)—White spirit(specification); mass c.(proc.) = ? mg/m³

Blood—White spirit(specification); mass concentration(procedure)
microgram/litre
Other term(s): Dry Cleaning Safety Solvent; Mineral spirits; Petroleum solvent; Spotting naphtha; Stoddard solvent
Note(s): CAS 8052-41-3; White spirit is a mixture of saturated aliphatic and alicyclic C7–C12 hydrocarbons with a mass fraction of 15–20 % of aromatic C7–C12 hydrocarbons and a boiling interval of 130–230 °C; the C9–C11 hydrocarbons (aliphatics, alicyclics and aromatics) are most abundant, constituting a mass fraction of > 0.80 of the total
NPU16876
Blood—White spirit(specification); mass c.(proc.) = ? µg/l

Air(ambient)—Wood dust(specification); mass concentration(procedure)
milligram/cubic metre
Authority: ACGIH
NPU16877
Air(amb)—Wood dust(spec.); mass c.(proc.) = ? mg/m³

Air(ambient)—

Xylenes;
substance concentration
millimole/cubic metre
M = 106.17 g/mol
Other term(s): 1,3-Dimethylbenzene; meta-Xylene; m-Xylol
Note(s): CAS 108-38-3
NPU16880
Air(amb)—m-Xylene; subst.c. = ? mmol/m³

Water(drinking)—
p-
Xylenes;
substance concentration
millimole/cubic metre
M = 106.17 g/mol
Other term(s): 1,4-Dimethylbenzene; para-Xylene; p-Xylol
Note(s): CAS 106-42-3
NPU16882
Air(amb)—p-Xylene; subst.c. = ? mmol/m³

Water(drinking)—
p-

Cells(Blood)—

Zinc(II);
substance content
micromole/kilogram
A = 65.38 g/mol
Note(s): CAS 7440-66-6 (element); Atomic mass for elemental zinc
NPU16938
Cells(Blood)—Zinc(II); subst.cont. = ? µmol/kg

Hair—
Zinc(II);
substance content
millimole/kilogram
A = 65.38 g/mol
Note(s): CAS 7440-66-6 (element); Atomic mass for elemental zinc

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Hair—Zinc(II); subst. cont. = ? mmol/kg

Plasma—Zinc(II);
substance concentration
micromole/litre
$A = 65.38 \text{ g/mol}$
Note(s): CAS 7440-66-6 (element); Atomic mass for elemental zinc

Seminal plasma—Zinc(II);
substance concentration
micromole/litre
$A = 65.38 \text{ g/mol}$
Note(s): CAS 7440-66-6 (element); Atomic mass for elemental zinc

Water (drinking)—Zinc(II);
substance concentration
micromole/litre
$A = 65.38 \text{ g/mol}$
Note(s): CAS 7440-66-6 (element); Atomic mass for elemental zinc

Seminal plasma—Zinc(II); subst. c. = ? µmol/l

Air (ambient)—Zinc oxide;
substance concentration
micromole/cubic metre
$M = 81.38 \text{ g/mol}$
Note(s): CAS 1314-13-2

Seminal plasma—Zinc(II); subst. c. = ? µmol/l

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